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MEDICAL MONTHLY

(RICHMOND.)

VOLUME XIV,

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LANDON B. EDWARDS, M. D.

EDITOR AND PROPRIETOR.

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ART. I.—**Sketch of Milton Josiah Roberts, M. D.** (**With Portrait.**) By J. J. SULLIVAN, M. D., New York.

The Professor of Orthopedic Surgery and Mechanical Therapeutics at the New York Post-Graduate Medical School and Hospital, Dr. Milton Josiah Roberts, is distinguished not more for his innovations in the operative methods of bone surgery, which mark a distinct advance in that department of science, than for his numerous and valuable original contributions to the subject of mechanical therapeutics as applied to the relief of suffering, the cure of disease, and the prevention of unsightly bodily deformities. Though he started late in life, handicapped with ill health, empty hands, and restrictions in opportunities, he has, during his short professional career, won a reputation for practical scientific attainments which might well satisfy the ambition of a much older man.

The Hon. Andrew D. White, late President of The Cornell University, and former U. S. Minister to Berlin, in introducing by letter the subject of this sketch to a distinguished University President, wrote September 22, 1885:

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"The bearer of this, Dr. M. J. Roberts, is a *genius*. He proved this at Cornell, by his fertility in resources, as regards scientific investigations, and he has proved it in a more striking degree since."

Prof. Roberts was born in Norwalk, Huron county, Ohio, August 30th, 1851. His parents and grandparents were farmers, and all of them were characterized by their industry, frugal habits, integrity of character and great physical strength. During the early years of his life, his parents lived in a log cabin built on a small clearing in the midst of a dense forest. When about seven years old, he was stricken down with a severe and almost fatal illness, the result of imprudent exposure in mid-winter. For more than seven years thereafter he was so delicate in health that he was necessarily deprived of all educational advantages.

When ten years of age he was taken by his father to Ann Arbor, Michigan, to be treated by a cousin who was then practicing medicine in that place. While under treatment, he served as an office-boy to his cousin. Here, he first came in contact with patients. He soon became practically familiar with much of the routine work of the office, and evinced a special interest in the progress which patients made towards recovery.

After a number of months, he returned to his home on the farm, where he led an out-of-door life. The strength of his constitution finally triumphed, and, after being in a delicate condition for years, he regained his health and strength, though he could not be called robust. He was at this time fourteen years of age, and was scarcely able to read or write. His want of early mental training was now sorely felt by him. This deficiency, coupled with the fact that he had never associated much with other children, made him extremely averse to society. He was very awkward in his manners, and this awkwardness was enhanced by an extreme degree of left-handedness. He began to go to school, however, and made rapid progress. In addition to his school studies, he read whatever books he could get access to on etiquette, deportment, letter writing, oratory, etc., but had little opportunity to practically use the information thus ac-

PHOTOGRAVURE CO. N.Y.

Faithfully yours,

Milton Josiah Roberts.

quired. He attended school winters, and worked on the farm summers.

In 1869, he took up the independent study of short-hand, copying from a borrowed book the principles of Ben. Pitman's system in a single night. From this time he became a persistent note-taker of things observed and work done, which practice he has ever since continued. His fondness for the study of natural history objects was always marked. Whenever an opportunity offered, he would go into the fields and woods. He was fond of fishing and of hunting wild birds and animals. He made an extensive collection of butterflies and other insects, and began to practice the art of taxidermy, getting the first hints from an Iowa agricultural report. He made his first scalpel by grinding down a large and thick old-fashioned razor. With this he afterwards skinned and dissected many hundreds of birds and other animals. He collected and mounted nearly all the species of birds, mammals, reptiles and fishes indigenous to the section of country in which he lived. A part of this collection was exhibited in a case at the county fair in his native town, and was awarded a premium. His father was greatly opposed to his spending so much time in hunting and in taxidermic work, and used to tell him that he could find abundant opportunity for the exercise of all his energies in the field with the plow, or in the garden with the hoe; but the passionate attachment he evinced for these pursuits was too great to be easily overcome. In the contemplation of nature his whole thoughts were wrapped up. He chafed somewhat under the restraint of his father, who was exacting and methodical to the last degree, and required implicit and prompt obedience in all things. He compiled a manuscript work on the art of taxidermy, trapping, shooting and hunting wild birds and animals, with an appendix on the training and care of game dogs.

In January, 1870, his health again failed him, and he was obliged to quit school. The following fall he came across a man who told him such wonderful stories about animal life in Florida, that his mind was fired with an ardent desire to visit that country. His father at first was unwilling that he

should leave home, but when it was found that he was resolved upon going, consent was given, and his parents supplied him with a complete outfit for collecting specimens. During his six months' stay in Florida, he made an interesting collection of natural history objects, including birds, their nests and eggs, mammals, fishes, reptiles, insects and some flowers and plants. After returning home, he worked on his father's farm, and became expert in the use of all agricultural machinery. In repairing machines of this class, which he was frequently called upon to do, he developed considerable mechanical skill. As an incentive to reading, his father gave him the books in the family library as fast as he would read them through. Among these was one on veterinary medicine, which he studied very carefully. Not infrequently he made use of the knowledge thus acquired, by administering medicine to the animals owned by his father, and on several occasions performed considerable surgical operations on them.

His father was anxious that he should take charge of the farm and remain at home, but the natural inclinations of the boy prevailed over all paternal consideration. A schoolmate, with whom he had frequently been on butterfly hunts, and who had returned from Cornell University to spend his summer vacation, fired young Roberts' mind with the idea of going to college at Cornell. Though at first he could not get the consent of his parents to go to school so far away from home, he began at once to review his studies, and to prepare for entrance examinations at Cornell. Finally, after long pleading, he obtained consent, a few days before the examinations, to enter Cornell, under the promise to his father of becoming a civil engineer. While at college he contributed materially to his support by working at rough carpentry on President White's house, then being built, putting in five hours' work five days in the week, and ten hours on Saturday.

In the spring of 1872, he was obliged to leave college and return to the farm to take charge of it, on account of the ill-health of his father. While at home he studied nights and odd spells as much as possible. No opportunity was

lost, however, to gratify his passion for hunting and the study of birds in their native haunts. He regularly attended the meetings of the Norwalk Natural History Club, and gave lessons in taxidermy to some of its members. He studied botany, and collected flowers. His diary for this period is full of observations regarding the habits of birds and other animals, together with notes on plant life.

In September, 1872, he returned to Cornell, and was in the habit of getting up at one, two and three o'clock in the morning to study his lessons. While at college this time, he took charge of the finances of a students' boarding club, purchasing provisions, etc., and in this way got his board free. In December of the same year he was again obliged to leave college, and to take his father, who suffered from asthma, to Florida. On this trip he visited the uninhabited parts of Florida, and collected natural history specimens. To facilitate travelling, should he again desire to go over this part of the country, he made a sailing chart of the Keys, the southeastern coast of Florida, and Indian river from Fort Jupiter Light, northward, 150 miles. After nearly eight months of life in the woods, and still remote from all medical aid, he was stricken down with a very severe type of malarial fever, from which he made a slow recovery. He reached home in the latter part of August, 1873, bringing with him considerable additions to his natural history collection, and a live alligator, which he kept as a pet for ten years. The following month, September, he re-entered college, though in poor health and suffering continually from malarial symptoms.

Now he began to assume for the first time the responsibility of shaping his course of study to his own liking. From civil engineering his mind was ever reverting to his first love. He desired to become a naturalist, but saw no opening in that field of knowledge that would ensure him a comfortable subsistence. He, therefore, decided to study medicine. He spent much time in the anatomical laboratory, working under the direct supervision of Prof. Burt G. Wilder, the distinguished comparative anatomist. For a time he contributed to his support

by making tiles, house painting, paper hanging, and other work which he could get to do. His first publication was an article entitled, "Among the Florida Keys," which appeared in the January number of *The Cornell Review* for 1874. This article consists of a summary of his personal experience on his two trips to Florida, and is full of interesting information regarding animal life, the country and its people. At college he took a special course in veterinary science, under Prof. James Law, and frequently assisted that distinguished veterinarian in major surgical operations upon domesticated animals.

His ear for music was entirely uncultivated—in fact, worse than that, for he could scarcely distinguish one tune from another. This was a source of great annoyance to him, and he determined to learn something of music. He first tried the flute, then the piano, and finally the clarionet. With the assistance of a kind friend, he studied and learned the transposition of the scales, and after much independent practice was finally admitted to the Cornell orchestra as second clarionetist. About this time he was appointed taxidermist to the University, a vacancy having occurred in that department. Here he found congenial exercise for his natural tastes, and the knowledge he had already acquired in this direction now came in good stead. The increased wages which he was able to earn by doing skilled work, afforded him more time for study. He mounted a large number of birds and mammals, ranging in size from a humming bird to a dromedary. At his instigation, and with the co-operation of President White, Professor Law, and Professor Wilder, rooms were fitted up by the University authorities for the preparation of skeletons. He acquired wonderful skill in the use of the scalpel, and could make what is technically called a "skin" of a small bird in the short space of a minute and a half. At one time he was employed on *The Weekly Ithacan*, to write locals and special articles. With the idea of further increasing his ability to contribute, under varying circumstances, to his support, he took up the art of wood engraving, and resumed the systematic study of short-hand, in addition to his regu-

lar studies and University work. Though he never became proficient at wood engraving, he acquired great skill at shorthand writing. This knowledge stood him good in after years, and enabled him to contribute largely to his support while attending medical lectures and in the first years of his professional life.

In October, 1875, he read an original paper before the Natural History Society of Cornell University, entitled "The Anatomy of a Feather: having two million, two hundred and fifty-one thousand, four hundred and one parts." In March, 1876, on account of being unable to use his eyes at close work, he was granted a leave of absence from the University. With the idea of subsequently making use of it in the study of medicine, he learned photography. In August, 1876, having visited New York City, and been assured by competent oculists that he could, with proper glasses, resume studies, he prepared to leave Cornell. Prior to leaving the University, he donated to that institution his entire collection of mounted and unmounted birds, mammals, reptiles, etc., made by him, together with an herbarium of plants and sea algæ, which had been made by his mother while she was in California. The plan for the construction of the museum cases which contain the Green Smith collection of birds at Cornell, as well as his own zöological collection, was suggested by him.

On September 13th, 1876, young Roberts entered the Medical Department of the University of the City of New York, with Prof. Burt G. Wilder, of Cornell University, and Prof. William H. Thomson, of New York, as preceptors. He came to New York a total stranger. Not only did he come to study medicine, but with the avowed intention of remaining to practice it after graduation. It had been his intention to utilize his knowledge of photography, while studying medicine by photographing deformed patients, but this he found impracticable under existing circumstances.

As an example of the fertility of his mind and originality of thought regarding every subject which he took up, the following may be mentioned. One of the first acquaintances which he made in New York, outside of his fellow students,

was that of Mr. O. G. Mason, photographer to the Department of Charities and Corrections—a man of scientific instincts and great practical ability. He made a confidant of Mr. Mason with regard to some views which he entertained as to the application of photography to the wants of medicine, with the idea of ascertaining whether they were practicable or not. What he proposed to do was to record the successive attitudes, oscillations and movements of the human body in health and disease, during locomotion. This was to be accomplished by making instantaneous photographs in conjunction with the graphic method of recording movements. First, it was proposed to make a record and analysis of the locomotive attitudes and movements of healthy males and females of all ages, to be followed by the record and analysis of the locomotive attitudes and movements of patients suffering from disabilities that interfere with or prevent normal movements. Having accomplished this much, the photographed attitudes, and the graphically represented trajectories of the body, in health and disease, were to be carefully studied, in order to detect identities and differences, and to correlate them as far as possible. By thus reducing the succession of complicated movements to the form of a simple statement, accompanied with ocular representations of the corresponding attitudes, it was believed that much scientific and practical information would be made available alike to the physiologist and physician. Though no experiments of the kind proposed by young Roberts had ever been undertaken, Mr. Mason, as a practical photographer, considered them feasible. Their great expense, however, precluded the possibility of their being undertaken, as it was estimated that the probable cost of a first series of experiments would be not less than ten thousand dollars. The suggestion by young Roberts, at this time, of these experiments is noteworthy, inasmuch as it was about two years afterwards before the work of the celebrated photographer, Mr. Edward Muybridge, under the patronage of ex-Governor Leland Stanford, of California, in photographing the successive attitudes of horses and other animals in motion, was made known.

Life in a great city like New York was a novelty to our young student of medicine, and he found many things to interest him, when opportunity offered for relaxation. He made extended notes of his observations, and on one occasion wrote and published an article on Jeremiah McCauley, giving a sketch of his life and work as a reformer. Owing to his limited means he was obliged to live very economically—his board, room, light and fuel costing him but five dollars per week. He made phonographic reports of lectures for the University professors upon which he afterwards was obliged to pass examination. These he wrote out on the type-writer. This work served the double purpose of increasing his medical knowledge and materially contributing to his support. While prosecuting his medical studies, he made and published an original contribution to phonography. He also compiled a manuscript work on medical short-hand. In company with Prof. William H. Thomson, his preceptor, he walked the wards of Bellevue and Roosevelt Hospitals, making notes of important cases, and conducting qualitative and quantitative chemical examinations for Prof. Thomson, when necessary. While a student in 1877, he took three courses of physical diagnosis, and attended twelve cases of confinement. While attending lectures he consecrated all his energies to the study of medicine, and for two years he pressed onward in his studies with untiring zeal and unflagging industry. The time was now approaching when the reward for which he had worked so long and persistently was within his reach. He was soon to go forth from college to play his part in life's great drama. His thoroughly trained mind, ample stores of medical knowledge and polished address, well fitted him for the combat. He selected for the subject of his graduation thesis, "Museums as Educational Adjuncts to Medical Colleges," which was one of two essays that received honorable mention out of a class of 154 graduates, and was a pioneer paper upon this subject.

February 14th, 1878, he received notice of his having successfully passed his medical examination, and on the same day accepted the invitation of Dr. C. E. Billington, to become

his assistant at the out-door Department of the Demilt Dispensary, and began work that afternoon.

At this time his vital powers were greatly reduced in consequence of his close application to study, and the necessity for doing outside work incident to his struggle for existence. He had not worked long, visiting the families of the poor and distressed, before he was stricken down with facial erysipelas, which came nigh a fatal issue. His recovery from this illness was extremely slow. On April 1st, 1878, however, while still unable to walk more than one or two blocks, he opened an office on W. 38th Street, three doors from Fifth Avenue, borrowing the money from a newly made friend, to pay for the first month's office rent. He reported lectures for the *New York Medical Record, the Philadelphia Medical News, New York Medical Journal, Virginia Medical Monthly*, and many other medical periodicals throughout the country.

He had already received the full share of his paternal patrimony at the inception of his professional life; and without friendly advice or assistance, but with his education, his indomitable perseverance and great energy as his only inheritance, he began the practical solution of the difficult problem of making a professional reputation, and acquiring the patronage of the best people in the land. As a short-hand writer, he became known to a great number of prominent members of the medical profession in New York and throughout the country, though he never allowed his name to appear in connection with his reports. It was through his work in this line that he was brought to the notice of Prof. Lewis A. Sayre, by whom he was afterwards employed as assistant in his private practice, which relations were continued for a period of a year and a half. During all this time he maintained an independent office of his own.

In the summer of 1878, he was temporarily appointed Orthopedic Surgeon to the First Division of Bellevue Hospital, Out-Door Department, by Dr. A. B. Mott, to take the place of his friend, Dr. Charles H. Sayre. Soon afterwards he was appointed Professor of Physiology in the New York College of Veterinary Surgeons. He delivered a short course

of lectures at this institution, and then severed his connection with it. In a letter to his parents, at the conclusion of his first year's practice of medicine, he alludes to the severe struggle he had for existence in the following terms:

"At the time I opened an office, I owed almost $150 in local debts, was without a dollar in my pocket, and was scarcely able to walk more than a block or two; and what is more, I did not know where a single dollar was coming from, having only a short time previously received a letter from you, saying you could not furnish me with any more money. Just at the time I needed friendly aid, it seemed as if all my friends had deserted me. I had, however, resolved with all the determination I could summon, that I would practice medicine in the city of New York in spite of all opposition, no matter how great or long continued; and further, that I would struggle for a practice among its better inhabitants."

In the summer of 1879, he assisted Dr. John S. Warren, of the Department of Diseases of Women at the Demilt Dispensary, and took charge of the work in this department during Dr. Warren's vacation. In the fall of 1879, he became intimately associated with the late Dr. George M. Beard, performing most of the surgical operations called for in that gentleman's extensive practice. This relationship continued uninterrupted up to the death of Dr. Beard. He always speaks of Dr. Beard in the kindest terms, and attributes a great deal of his success in after life to his friendly advice.

In January, 1880, he was appointed a subordinate assistant at the surgical clinic of Professor J. Williston Wright. At this clinic most of the orthopedic cases were turned over to his charge. He was thus afforded abundant opportunity of studying the class of cases in which he was so much interested. He continued to contribute largely to his subsistence at this time by reporting the lectures of the leading professors in the medical colleges, and by making society reports for publication in medical journals. Some idea of the enormous amount of shorthand work which he had done up to this time can be gained from the fact of his having written out and published nearly thirty-seven octavo volumes of shorthand notes, of three hundred pages each. His shorthand

labors culminated in what he himself calls "the mistake of his life," being a series of lectures delivered by Professor Francis Delafield, on the Practice of Medicine. These he phonographically reported, and subsequently edited and published, making a volume of three hundred and fifty closely-printed octavo pages.

In the fall of 1881, he was appointed Professor of Surgical Pathology in the American Veterinary College, and delivered the inaugural address at that institution October 3d, selecting as his subject, "The Art of Scientific Discovery in Medicine." After delivering a course of fourteen lectures, he resigned.

During all these years spent in the field of practical observation, he was storing up a vast amount of knowledge. He preferred to study nature rather than books. He took full notes of all his cases, and made photographs of many of his patients before, during and after treatment. His first medical contribution was a paper read before the New York County Medical Society, Jan. 22, 1881, entitled, "Elastic Tension and Articular Motion as Therapeutic Agents in Mechanical Treatment of Chronic Inflammations of Joints, with a Description of New Apparatus for the Knee and Wrist Joints." This was followed, during the same year by the following contributions: "Elastic Tension Therapeutically Utilized in Adhesive and Medicated Plasters;" "Elastic Tension Apparatus for Dislocation of the Humerus;" "Elastic Tension Apparatus for Anchylosis of the Knee Joint;" "Remarks on Carotid Compression as a Means of Euthanasia;" "Elastic Tension in Pott's Disease;" "Non-Uniformity in the Principles of Treating Pott's Disease, as taught by Professor Sayre;" "Elastic Tension and Articular Motion in Pott's Disease," and "The Mechanical Treatment of Caries of the Lumbar Vertebræ."

Immediately following the first meeting which the resigned Post-Graduate Faculty of the University Medical College held for the purpose of organizing a new School for Post-Graduate instruction, Dr. Roberts conceived the idea that there was now an opportunity for the practical realization of an object which he he had long entertained as desir-

able—viz., the founding of a Medical Department of Cornell University, in the city of New York. The gentlemen above referred to adopted this suggestion of Dr. Roberts, and, at their urgent request, he proceeded at once to Ithaca, to lay the proposed plan before President Andrew D. White. As a result of this interview, President White became deeply interested in the scheme, and negotiations were instituted between the President, the Trustees of Cornell University, and the resigned Post-Graduate Faculty. These negotiations, however, did not lead to the desired end. Instead, therefore, of founding a Cornell University Medical School in New York, with a Post-Graduate Department, the gentlemen above referred to, continued with their original plan, organizing a School solely for Post-Graduate instruction.

On June 15th, he was appointed Instructor in Orthopedic Surgery and Mechanical Therapeutics in the new Post-Graduate Medical School, and was subsequently made Assistant Secretary of the Faculty. After delivering one course of lectures on orthopedic surgery, he was appointed Associate Professor of Clinical and Operative Surgery, and continued to give instruction in orthopedic surgery and mechanical therapeutics. At the close of the first school year, the Department of Orthopedic Surgery and Mechanical Therapeutics was established, and he was appointed full Professor in charge of it, which position he has since continued to hold, delivering from two to three lectures per week.

In October, 1882, he was appointed Visiting Orthopedic Surgeon to the City Hospitals, on Randall's Island, furnishing recommendatory testimonials from Professor Wm. A. Hammond, Professor D. B. St. John Roosa, and other distinguished members of the medical profession. In the fall of 1883, he organized the New York Corresponding Medical School, and secured the co-operation of several prominent physicians. This scheme, however, was never carried into practical effect. In December, 1883, he was tendered a brilliant reception by Dr. William H. Daly, of Pittsburgh, at that gentleman's residence, there being in attendance about 150 representative medical men.

His medical contributions for 1883 were, "Report and

Presentation of a Case of Myxœdema;" "The Principles of Mechanical Treatment in Diseaae of the Hip Joint;" "The Electro-Osteotome, a New Instrument for the Performance of the Operation of Osteotomy, and a New Form of Retractor."

In the summer of 1883, upon the recommendation of the late Professor James L. Little, he was appointed Professor of Orthopedic Surgery in the University of Vermont, and delivered a course of lectures at that institution during its session of 1884. In the same year he made the following medical contributions: "Presentation of a Patient Illustrating the Successful Treatment of Knock-Knee by a Novel and Simple Method;" "Spina Bifida, Chronic Internal Hydrocephalus, Hydrorrachis, Double Convergent Strabismus, and Double Talipes Varus, Existing Concurrently; an Ocular Demonstration upon the Living Subject of the Communicability of the Fluid in the Sac with that Contained in the Ventricles of the Brain, by means of an Instrument of Precision; the Injection of Morton's Fluid, followed immediately by Coma, and four days subsequently by Death, together with the Post-Mortem Appearances;" "The Fundamental Principles of Mechanico-Therapy in Hip Disease, based on a Consideration of Clinical, Pathological and Physico-Physiological Data, with a Description of New Forms of Elastic Tension Hip Splints;" "Remarks on the Evolution of Head-Supports, with a Description of a New and Inconspicuous Head-Rest, whereby all the Movements of the Head are Regulated by Elastic Force;" "The Treatment of Ankle-Joint Disease, with Some Preliminary Considerations regarding the Mechanism of Cure in this and other Analogous Arthropathies based on the Therapeutic Application of the Law of Correlation and Conservation of Forces, with a Description of New Apparatus, and the Presentation of a Patient Cured without Deformity and without Anchylosis;" "The Mechanical Treatment of Elbow-Joint Disease; Presentation of Patient Wearing a New Elastic Tension Apparatus;" "Circumcision in Adolescent and Adult Life without Confinement after Operation;" "Remarks on a New Spinal Corset woven out of Wire to fit the Contour of the Body."

In 1885, he contributed: "Remarks on the Occurrence and Mechanical Treatment of Infantile Hemiplegia or Spastic Rigidity, with a Description of New Apparatus;" "Anatomical Geometry and Toponomy—an Introduction to the Scientific Study of Deformities, with a Description of New Mathematical Instruments;" "A Simple Form of Measuring Staff, with Goniometric Attachment;" "Description and Practical Demonstration of the Working of Roberts' Improved Electro-Osteotome, New Electrical Illuminating Apparatus, and a New Form of Portable Storage Battery;" "The Exploration, Excavation and Illumination of the Interior of Bones in any part of the Body;" "Presentation of Two Patients Illustrating the Favorable Progress of Suppurative Knee-Joint Disease while wearing Elastic Tension Splints permitting Articular Action of Affected Joints;" "The Epipedometer—Its Use as an Instrument of Precision, Illustrated in the Measurement of Deformities of the Feet;" "Orthopedic Technology—A Synopsis of a Course of Twelve Lectures, delivered at the New York Post-Graduate Medical School and Hospital;" "Electro-Osteotomy in Knock-Knee, Bow-Legs, and Anterior Tibial Deformities;" "The Sphenometer, a New Instrument of Precision in Bone Surgery;" "The Diagnosis and the Mechanical and Operative Treatment of Knock-Knee and Bow-Leg Deformities;" "Cocaine in Bone Surgery;" "Two Adjustable Box-Spring Joints;" "Cocaine Anæsthesia in Femoral Supra-Condyloid Osteotomy and Excision of the Hip Joint."

In 1886, he contributed: "The Mechanico-Therapeutics of Hip Disease and the Bone Diseases of other Joints;" "Presentation of a Patient Wearing New Combination Apparatus for Concurrent Spinal Caries and Hip Disease;" "A New Splint for Infantile Spinal Paralysis;" "Cuneiform Osteotomy for Hallux Valgus under Cocaine Anæsthesia;" "Clinical Remarks on Hip Disease;" "A New Method of Operating upon Abscesses in the Soft Parts." "Cuneiform Osteotomy for Anterior Curvature of both Tibiæ and Fibulæ; illustrating the great practical value of the Electro-Osteotome as a Bone-Cutting Instrument, and the Sphenometer as an Instrument of Precision in Bone-Surgery—Suturing of the

Bones with Kangaroo Tendons—Hydronaphtholized Surgical Dressings—Bruce's Bow-Leg Brace."

During the year 1887 he has thus far contributed: "A Rapid and Easy Method of Excision of the Hip Joint;" "Marked Spinal Deformity, probably the result of Chronic Peritonitis;" "Moulds, Casts, and the Modeling of Casts for Therapeutic Purposes;" "Spinal Supports—The Physical Condition, Form and Kind of Material Essential to make them out of to secure Accurate Adaptation to the Surface of the Body;" "The Treatment of Diseases, Deformities and Weaknesses of the Spine by means of a New, Efficient, Comfortable, Inconspicuous and Elegant Corset, with a Description of Several Novel Mechanical Adjuvants;" "A New Suspension Crane for the Electro-Osteotome;" "Combined Suspension Balance and Dynamometer—A New Instrument of Precision in Spinal Affections." "Bone Surgery—Report of Operations Performed on Twenty-five Individuals, in which the Electro-Osteotome was used as the Bone-Cutting Instrument;" "Contribution to the Pathology of Hip Disease;" "Contribution to the Pathology of Spinal Caries;" "Contribution to the Pathology of Knee-Joint Disease;" "The Electro-Osteotome still further Improved, and its Range of Usefulness Increased."

In February, of the present year, the Trustees of the Woman's Hospital, Brooklyn, elected Professor Roberts Consulting Orthopedic Surgeon to that institution.

In 1881, he was elected Delegate to the American Medical Asssociation from the Medical Society of the County of New York.

In 1884, the same Society elected him Delegate to the New York State Medical Society. He is a Qualified Examiner in Lunacy, and a member of the following Societies: American Association for the Advancement of Science, Fellow of the New York Academy of Medicine, Member of the Society of American Taxidermists, the New York County Medical Society, the New York Neurological Society, the North-Western Medical and Surgical Society, the Medical Society of the County of New York, the Society of Medical Jurisprudence and State Medicine, the Anthropological Society,

the New York Electrical Society, the Society of the American Institute, the Clinical Society of the New York Post-Graduate Medical School and Hospital, and Fellow of the New York Academy of Sciences.

In addition to the above papers, which are principally concerned with practical therapeutics as applied to the treatment of deformities and diseases of joints, Professor Roberts has invented a large number of instruments designed to facilitate operative procedures, the measurement of deformities, and the carrying out of the therapeutic indications to which his independent clinical observations and studies have led him. Of these inventions the following may be mentioned: "Elastic Tension Knee Splint, with Tibial Rotating Mechanism;" "Elastic Tension Knee Splint without Tibial Rotating Mechanism;" "Radio-Carpal Elastic Tension Splint;" "Elastic Tension Adhesive and Medicated Plasters;" "Elastic Tension Apparatus for Dislocation of the Humerus;" "Elastic Tension Apparatus for Anchylosis of the Knee-Joint, with and without Posterior Extension Mechanism;" "Elastic Tension Device for Attachment to Plaster of Paris or other Spinal Jackets, to overcome Lateral Tilt;" "Elastic Tension Spinal Traction Bars, with Brackets for Sectionized Spinal Jackets;" "Improved Form of Inconspicuous Elastic Tension Head-Rest;" "Elastic Tension Apparatus for Cervical Caries;" "Improved Elastic Spinal Traction Bars;" "Short Bilateral Elastic Tension Hip Splint;" "The Electro-Osteotome;" "A Protecting Retractor;" "Two New Forms of Silver Wire Suture Instruments;" "Elastic Tension Knock-Knee Splint;" "Long Bilateral Elastic Tension, or Self-Acting, Non-Traumatic Hip Splint;" "Long Bilateral Self-Acting Hip Splint, with Elastic Rotating, Abducting and Adducting Mechanism;" "Inside Elastic Tension, or Non-Traumatic Hip Splint;" "Outside Elastic Tension, or Non-Traumatic Hip Splint;" "A New Inconspicuous Head-Rest, whereby all the Movements of the Head are regulated by Elastic Force;" "Improved 'Jury mast';" Short Bilateral Non-Traumatic or Elastic Tension Ankle Splint;" "Long Bilateral Non-Traumatic Ankle Splint;" "Elastic Tension Apparatus for Elbow-Joint Disease;" "Elastic Tension Appa-

ratus for Anchylosis of the Elbow Joint, with Supinating and Pronating Mechanism;" "A New Spinal Corset woven out of Wire to Fit the Contour of the Body;" "Combination Apparatus for the Support of the Head and the Supination of the Hands;" "Swinging Crane for Elastic Suspension;" "Modified Tricycle, with Foot Pads, for Exercising Lower Extremities;" "Apparatus for Inversion of the Feet;" "Combination Apparatus for the Support of the Head, Trunk, and Upper and Lower Extremities;" "The Articular Goniometer;" "The Adjustable Protractor;" "The Epipedometer;" "Improved Electro-Osteotome;" "Measuring Staff, with Goniometric Attachment;" "The Electric Celioscope for the Illumination of the Interior of Bones and Cavities in General;" "Elastic Tension Apparatus for Shoulder-Joint Disease;" "Tape-Measure Attachment, enabling the Observer to make Uniform Traction upon the Tape;" "Circumferential Outline Tape for Obtaining Circumferential Outline or Cross Section of any Part of the Body;" "Instrument for Recording Surface Curves;" "Coiled Spring-Box Joint;" "Tortion Spring-Box Joint;" "Improved Protecting Retractor;" "Spinal Suspension Tricycle;" "Spinal Suspension Gymnasium for Attachment to the Ceiling;" "Wire Pad for Attachment to Spinal Corset, to Improve the Appearance of the Hopelessly Deformed;" "Combined Spinal Suspension Balance and Dynamometer;" "Speculum for Dilating Abscess Cavities;" "Improved Portable Storage Battery;" "The Sphenometer;" "Adjustable Suspension Crane for the Electro-Osteotome;" "Straight Saw Head-Piece for the Electro-Osteotome;" "Sectional Saw Head-Piece for the Electro-Osteotome;" "Splint for Infantile Spinal Paralysis;" "Combination Apparatus for Spinal Caries and Hip Disease;" "Improved Trephine, with Adjustable Protecting Sleeve;" "Improved Bone Calliper;" "Improved Primary Battery for the Electro-Osteotome;" "Improved Club-Foot Shoe."

From the foregoing, it will be readily understood that Prof. Roberts has led an intensely active prefessional life, for his contributions to medical literature and to mechanical therapeutics have been carried on in conjunction with the

imperative demands of an extensive and rapidly increasing practice. As a result of his clinical studies and observations, he has elaborated a complete system for the mechanical treatment of chronically inflamed joints. In carrying out this work he has not been content with introducing his innovations to the profession, backed only by the assertion that they would be found to possess marked advantages over those that had preceded them. He has gone further than this, and supported his therapeutic ideas by a rational course of reasoning, based upon physico-physiological data, clinical observations, pathological findings, and what is known of the laws of growth and repair.

As his clinical observations, together with his other studies, led him into therapeutic paths widely separated from those generally accepted by the profession, it has been necessary for him to invent instruments for all of the principal joints of the body, which would enable him to practically carry out these ideas. No one who is not thoroughly familiar with the difficulty of procuring competent workmen to carry out novel mechanical ideas, can appreciate the extent of this undertaking, to say nothing of the great expense involved in it, which he has independently borne.

Not only has he added largely to the resources of mechanical therapeutics, but, it is believed, that he is the first to introduce the use of instruments of precision in operative bone surgery, thereby eliminating at once a large number of the sources of error which continually embarrass the surgeon.

His paper on the "Exploration, Excavation and Illumination of the Interior of Bones in any part of the Body," is full of suggestiveness for the operative surgeon, and has already attracted a great deal of attention and favorable comment.

He was the first to apply to bone surgery the teachings of Dr. J. Leonard Corning regarding the prolongation and intensification of the local anæsthetic effect of cocaine.

Among his inventions there are two that have been the result of long and persistent efforts on his part, and have involved the expenditure of a great deal of time, money and experimental work. These are the electro-osteotome and his woven wire spinal corset. Recognizing the necessity for

an instrument that would divide bone with as much ease as the soft parts are divided with a sharp scalpel, and at the same time do away with the tearing and laceration incident to the use of the ordinary appliances for cutting bone, he has invented and perfected the electro-osteotome. This invention was originally brought to the notice of the profession in October, 1883. With the successive improvements made during a period of three years, it has been so elaborated and perfected, that it is to-day undoubtedly the most complete, effective and manageable bone-cutting instrument in existence. Not only this, but an entirely new line of operations in bone surgery and improved methods of performing old operations are made feasible by the invention of the electro-osteotome.

Prof. Roberts' woven wire spinal corset is also an invention which merits special mention in this sketch. It is original in conception, effective in practice, and elegant in appearance. It is the result of five years experimental work in the construction of spinal supports. It is made directly over a cast of the body, and when removed from the cast retains its exact form. The use of this corset in the treatment of diseases, deformities and weaknesses of the spine, has yielded most satisfactory results. Being composed of an open wire mesh, it permits of the thorough ventilation of the body. The respirations are unimpeded by it, while its comfort, inconspicuousness, elegance and durability all combine to make it a great favorite with all those who have a personal knowledge of its merits.

Recently, Professor Roberts has fitted up and thoroughly equipped, at his own expense, an experimental surgical laboratory, in which he is conducting a series of experiments in bone surgery upon the lower animals, with the ultimate view of adding to our resources for the alleviation of human suffering, the correction of unsightly deformities and the more rapid termination of chronic bone diseases.

He has, during his nine years of active professional life, collected a vast amount of clinical data and other material, which, it has been impossible for him up to the present time to elaborate in such a manner as to permit of its being

brought to the attention of the profession. But with his rapidly increasing resources and unchilled devotion to the advancement of medical science, the profession will not have to wait long for further contributions.

Prof. Roberts is a man of medium height. He is quick in his movements, and possesses the rare qualities of untiring energy and indomitable perseverance. All his writings are characterized by originality and independence of thought, combined with simplicity of arrangement, and lucidity of exposition. Believing that advancement in medical knowledge depends largely upon the avoidance of self-deception, he has disciplined himself to be a severer critic of his own work than is his most formidable professional adversary. He is a close student and penetrating judge of human nature. Possessed of generous impulses and deep emotion, he has the courage of his convictions, and is a true and steadfast friend. He dislikes shams under whatever garb they may present, and never loses an opportunity to warn his pupils against the traps and pitfalls of their professional life. As a lover of science, and a warm sympathizer with the sufferings of the poor and afflicted, he has taken a deep interest in the evolution of those processes which have a direct bearing upon human welfare. Towards those departments of inquiry, which have for their end the relief of human misery, and the cure of deformity, his mind is ever tending. His unremitting exertion in this direction is sufficient to have undermined a constitution set in an ordinary mould; but his strong body, his unstinted zeal, cheerful disposition, and overflowing enthusiasm carries him triumphantly over every obstacle that lies in his path. This is one of the most remarkable elements of his character, and the one that has, more than anything else, enabled him to tide over the difficulties that presented during his first years of professional life in New York. Though still a young man, he has won a reputation in the domain of mechanical and operative bone surgery, that cannot any longer be confined within the narrow limits of a State or country.

ART. II.—**Lacerations of the Perineum—Their Cause and Prevention—Incidentally How to Resuscitate Asphyxiated Child.** By H. T. BAHNSON, M. D., President of Medical Society of North Carolina, etc., Salem, N. C.

A few years ago obstetricians were practically unanimous in the opinion that by supporting the perineum during the passage of the head through the introitus vaginæ, lacerations of the perineum could be prevented. At present, the sentiment appears to be divided—some contending for, and others against the plan.

While I do not mean to deny that the pressure of the child's head does occasionally lead to perineal rupture (and this happens, whether or not the tissues are supported by the hand or otherwise), I have for years been satisfied, by careful observations, that comparatively few ruptures are due to this cause.

In the summer of 1876, two cases occurred in my practice, which, from their peculiarity, directed my attention to this subject; and further observations led to the conclusion that the head is seldom a factor in causing rupture of the perineum. As both cases presented practically the same features, a short description of one will answer my purpose:

Mrs. M. B., white, æt. 23, primipara, was successfully delivered of a very large, healthy child. The perineum was carefully guarded, and showed no trace of laceration. The uterus contracted perfectly, and in about an hour I left her in a comfortable condition. Two hours later I was hastily summoned, and found her almost moribund from hæmorrhage. As the uterus was firmly contracted, I apprehended a rupture of the os. Digital examination showed the os intact. The vagina was filled with clotted blood, and in expelling this, my finger came upon an extensive rupture in the vagino-rectal septum. Separating the vulva, I was enabled to discover a laceration extending from a point a little above the perineal margin, nearly two inches upwards in the posterior wall of the vagina. The hæmorrhage came from numerous small vessels, which it was impossible to ligate. Drawing the edges of the wound together with a few sutures of fine silk effectually controlled the bleeding.

In reflecting over these two cases, I remembered that after

the head was born, the child showed symptoms of asphyxia; and in order to hasten delivery, I had pulled the child's head backwards so as to disengage its anterior shoulder from its position behind the pubic arch. The sharp point of the opposite acromion process had thus been permitted to plough along the posterior vaginal tissues. The perineum was saved from rupture, because the posterior shoulder was still high up in the vagina when the anterior shoulder was disengaged and delivered. After the anterior shoulder had passed from under the arch of the pubes, the pressure posteriorily was of course lessened.

Observations in subsequent cases convinced me that the sharp point of the shoulder is responsible for rupture of the perineum in a majority of instances. Too often it happens that the physician relaxes his care after the delivery of the head; or worse still, he pulls upon the head to hasten the delivery of the shoulders. In such an event, the full force of the point of the shoulder is exerted upon the tense tissues of the perineum, and a rupture results.

If time is taken to watch the natural course of parturition, it will be observed that after the head is extruded, the perineum retracts, and the anterior shoulder is pushed upwards behind the pubic symphisis, while the neck of the child rests in the pubic arch. The expulsive pains then carry the posterior shoulder over the perineum without a strain to its tissues; and only after this is effected, and the yielding body of the child rests upon the perineum, does the anterior shoulder make its appearance.

The fear of asphyxia of the child is a groundless one, if this natural process is allowed to go on without interference. Even in those rare cases in which the cord is wrapped several times around the neck of the child, and can neither be brought over the head, nor slipped past the shoulders—when our only resort is to cut the cord—there is seldom danger of serious hæmorrhage. Cutting the cord stimulates the respiratory function of the child, and after respiration is established, contraction of the umbilical vessels speedily supervenes.

An *infallible method of resuscitating an asphyxiated infant* is

to cut the cord and allow bleeding to occur. As if by magic, the cyanosis disappears, and the crying of the child announces restored respiration and circulation. What is the effect of such bleeding upon the so-called physiological loss (in weight) in new-born infants, I confess I have never taken the trouble to investigate. Formerly I resorted to this plan only after the methods ordinarily advised had failed, or imperfectly relieved the asphyxia. Now I use it at once, as it is by far the quickest and best method, and never have I seen anything but the best results follow.

The tendency in midwifery is ever to meddle. Measures to relieve the sufferings of parturition can always be unhesitatingly adopted. On the contrary, the means too generally resorted to for curtailing a natural physiological process are usually ill-advised, and too often are followed by disastrous consequences. Obstetrical writers are strangely reticent as regards the delivery of the body of the child; and yet I am sure that all who will study the subject without prejudice, at the bedside of their patients, will agree with me that it deserves attention, if for no other purpose than to avoid untimely interference.

Simple and successful as is usually the stitching together of a ruptured perineum, it is certainly far better to avoid the accident which makes it necessary. A ruptured perineum has not occurred in my practice in nearly ten years; and since I ascribe this fact to the precautions I have taken, I may be pardoned for detailing them.

The woman being upon her back, I insist upon the avoidance of sudden or severe straining as the head passes over the perineum. If she is not amenable to reason, I encourage her to inhale chloroform freely. After the head is delivered, I support it with one hand, and bring it well forward, so as to emphasize the normal position of the neck in the arch of the pubes. The next pain usually causes the posterior shoulder to protrude through the vulva. Passing my forefinger behind the shoulder, I carry the arm of the child over the front of its chest and out of the maternal parts. It is then safe to lower the head and body of the child, and allow the anterior shoulder to pass out under the arch of the pubes.

Again elevating the body of the child, the posterior hip is made to pass out first, and the anterior hip and lower extremities immediately follow. The process is continuous, and occupies less time than is required to describe it. Every step is in strict conformity with the normal unassisted process of parturition; and while expediting delivery, it will be observed that both the child and the maternal parts are effectually guarded against injury.

ART. III.—**Vesical Irritability Dependent upon Contractions of the Urethral Orifice.*** By WM. PERRIN NICOLSON, M. D., Professor of Anatomy and Lecturer on Clinical Surgery, Southern Medical College, etc., Atlanta, Ga.

Though within recent years' disturbances due to urethral contraction, with consequent irritation, have been somewhat fully discussed in treatises devoted to genito-urinary affections, and observers have been somewhat uniform in their observations, I am fully convinced that much material brought out in these works has failed to reach the larger bulk of the profession; or, if it has, it has not been put to practical application.

That many severe and painful reflexes, dependent upon irritation of the male urethra, fail entirely to yield to any medical treatment, while they can be speedily and simply relieved by almost trifling surgical interference in many cases, will be no new doctrine to present to those who have taken the pains to investigate the matter. I think also that the position can be maintained that in a large number of cases these irritations are due to a congenital contraction of the meatus, to a greater or less degree. It is with a view to drawing attention to this fact that I bring this subject before you this evening.

The first question that confronts us in discussing narrowing of the urethral orifice as an ætiological factor in these cases is what constitutes a narrowing at this point? We have always been taught that this should normally be the narrow-

* Read before the Atlanta Society of Medicine.

est part of the urethra, but as far as I know no authority has defined *how much* difference should exist between this and the canal behind it. An investigation of a given number o cases will reveal a very wide range in the relative size of the meatus and urethral tract; so that anatomically, I believe it would be difficult to arrive at a fixed standard. In general I should say that an orifice more than a few sizes smaller than the middle of the penile portion of the urethra constitutes a contraction of the meatus. It is true that we constantly see men who have passed through life with a very narrow meatus and no trouble resulting therefrom; but on the other hand, in pathological conditions, we observe a recurrence of all the symptoms upon a re-contraction amounting to only a few millimetres of circumference. As I have said, then, should examination reveal an orifice more than a few sizes less than the narrowest portion of the spongy urethra, we have, in my opinion, a contraction that may originate or perpetuate some of the most serious irritations belonging to this region.

Though the number of reflex disturbances that may arise from a too narrow meatus is great, I shall in this paper confine my remarks to *vesical irritability* as dependent upon this cause. It is interesting to follow the *modus operandi* by which the irritation from the urethral orifice is transmitted to the bladder. The meatus, bearing the relation to the urethra of the nozzle of a hose to the tube behind it, is naturally more pressed upon than any other portion of the mucous membrane; and that the force exerted by the muscles concerned in extrusion of the urine is not inconsiderable may be readily conceived by witnessing the same when there is some obstruction to its passage.

When the obstruction to the flow is located near the urethral orifice, the whole force of the bladder is exerted upon the walls of the urethra behind it, and the canal thus becomes distended—the membranous portion more so than the remainder, because it is less supported by surrounding tissues. The irritation thus excited in the membranous urethra easily extends backward to the vesical neck, and thus the bladder becomes so irritable that it will not tolerate even a small

amount of urine. Remove the obstruction, and permit the urine to flow without resistance, and the irritation of the urethra and bladder quickly subside without treatment.

Again, examination of the contracted meatus will almost always reveal a deposit of fibrous material, resulting from the long continued irritation and congestion; and the delicate nerve fibres of the glans entangled in this, manifest their direct reflex influence upon the neck of the bladder, just as a calculus resting in the bladder will cause constant pains in the glans penis.

That severe vesical irritation may result from contraction of the urethral orifice pure and simple (congenital or pathological), and that the same can be relieved by enlarging it, I think the following cases will amply demonstrate. They have been selected from a large number occurring in my own practice, because they are typical:

Case. I.—Mr. McC., merchant, aged 23, consulted me in the fall of 1885, for what he termed "weakness of the bladder." He had first noticed the trouble about a year before, when he observed that he could not retain his urine as long as usual. There was no history of gonorrhœa. He had taken medicine from several competent physicians, but without relief. At the time I saw him he could under no circumstances retain his urine more than two hours. So worrying had this become that he could not spend an evening in ladies' society on account of the imperative demands of his bladder. He was compelled to get up from his bed several times every night to urinate. This state af affairs had brought on a state of general nervousness that made him wretched. Upon examination I found his urethra 35 French, with meatus 20 F. Incision was performed the following day, enlarging the meatus to the calibre of the urethra. For two nights he was called up by his bladder, but from that time his trouble disappeared and he had no more of it.

Case II.—Mr. J. J. M., merchant, aged 22, came to me in 1882, with the following history. Some months before he had contracted gonorrhœa which had apparently disappeared, with the exception of some remaining gleet. The most urgent symptom for which he sought relief was an intense burning pain in the perineum, with uncontrollable desire to urinate. This desire, when even a small amount of urine was in the bladder, was irresistible.

On examination of the urethra with Otis' urethrameter, I found the canal 36 F. with meatus 22 F. There was also a contraction at two inches to 30 F. The mucous membrane, especially just within the meatus, and in the lower portion was exquisitely sensitive. Incision of the meatus to 35 French was immediately performed in my office, with a resulting cessation of all urgent symptoms from that day.

Some months afterwards this patient returned filled with gloom at a return of the trouble, and examination with the bulbous bougie revealed a re contraction of some degree. He reluctantly consented to another operation that gave immediate relief.

I thought then that I had divided all the fibres, but after about six months he entered my office with the remark, "I have come for you to cut me again." Examination showed contraction of three sizes only. This was freely incised, and he has no return of the irritability to this day.

Case III.—Mr. J. H. W., merchant, Marietta, Georgia, consulted me about the same time, presenting a condition practically identical with the above case, only the urethral orifice in his case was much smaller. Curiously enough he too suffered from re-contraction twice—the symptoms each time disappearing immediately after the operation. The last time the meatus was incised as freely as practicable, and he has had no recurrence of his trouble.

Case IV.—J. H. D., clerk, aged 19 years, consulted me in December, 1886, for extreme frequency of urination. For some time he had been unable to retain his urine day or night, for more than a very short time. When standing upon his feet he was called about every thirty minutes to relieve himself. There was no history of gonorrhœa, or any trouble previously, except that he was treated for "gravel" when a small boy. At his request, I put him under medical treatment, with the effect of somewhat lengthening the intervals between the acts of urination.

An acute attack supervening, he consented to accept the advice offered in the beginning. Previous examination had shown a well developed penis, measuring three and a half inches in circumference, with a meatus of only 16 F. The mucous membrane of the urethra was so sensitive that he would permit no examination of the canal. The meatus was incised to 33 F. For twenty-four hours the symptoms were increased in severity, but in a few days he was entirely relieved. Being very timid of pain, he failed to have the incision kept open, and speedy re-contraction, with a return of

all the symptoms took place. I again freely incised the orifice, and introduced the instrument regularly, and he was entirely cured. There has been no return of the symptoms to this day.

CASE V.—Wm. McC., white, aged 32, locomotive engineer, consulted me in January, 1887, for "weakness of the bladder." He was unable at that time to retain his urine more than half an hour during the day, and was compelled to rise several times each night. He gave a history of having been treated several times when a boy for "gravel." During all his life he had been subject to occasional attacks of bladder trouble, for which he had taken many medicines from many doctors. Examination revealed a small penis, with "pin-hole meatus," and I advised incision. At his request he was treated medically for a short time, but the relief being so temporary he consented to have the meatus enlarged. This was done so that 32 F. passed easily through the penile urethra. There was no tendency to re-contraction, and the incision healed in about a week, leaving his urination completely relieved. The result was practically immediate.

These cases illustrate fully the point that I desire to demonstrate, that severe irritation of the bladder may, and often does, result from the contraction of the urethral orifice, and that in these cases medical treatment fails to give anything more than the most temporary relief. They also show that the enlargement of the meatus to a size corresponding with the canal behind, does relieve the condition, without any other treatment being necessary. Without exception, these cases had been medically treated by competent physicians, with negative results.

The extent to which the meatus should be cut is a question of much importance. Undoubtedly too little cutting will result in failure, and a speedy return of the symptoms. The meatus should, in my opinion, be made at least to conform with the spongy urethra in its middle portion.

Another point that has guided me recently in determining the extent of my incision is that, in testing with the bulbous bougie, it should pass in without any "jump." This "jump" shows that the fibrous ring about the orifice has not been thoroughly divided.

There is often an almost wiry condition of the fibrous

band under the mucous membrane, and if this is not thoroughly divided contraction will surely supervene. It is always the natural tendency of the operator to cut less than is necessary, but all should follow the advice of Dr. Otis: "The incision must reach down *through all cicatricial tissues*, and so completely that the largest sized bulbous sound that can be passed through the opening shall pass in the urethra *without the slightest sense of resistance.* If it is less than this, the contraction is absolutely certain to return within a few weeks, or even a few days, in spite even of every possible effort to keep the parts dilated." When this precaution is taken there will probably be little tendency to a return of the symptoms. Should they, however, recur, then the orifice should be tested with the largest sized bulbous bougie that was originally admitted, and if *any* contraction is discovered it should be relieved by incision.

I am confident that by paying careful attention to the size of the urethral orifice, many cases of bladder trouble can thus be easily relieved, at a saving of much time and suffering to the patient. My advice would be in all cases of frequent and uncontrollable urination, when examination of the urine shows no inflammation of the vesical mucous membrane, examine the meatus, and incise it if it is found many sizes smaller than the canal behind.

In determining the size of the urethral canal behind a narrow meatus, there are two methods that can be pursued. The first and most exact is the measurement with Dr. Otis' urethrameter. This instrument can be introduced into any urethra whose orifice is more than 12 French; and by turning a screw in the handle a bulb is expanded—its size being registered upon a dial plate. This is useful also in detecting any narrowing at other points along the canal. Should the meatus be too small to admit the instrument, or should the physician not have it at hand, quite an accurate estimate may be made by measuring the flaccid penis with a tape line. Dr. Otis some years since demonstrated the fact that a constant relation exists between the size of the penis; and that in a penis measuring three inches the urethra will measure at least 30 French; three and half inches 35 French, and

so on. This will be found sufficiently accurate for practical purposes.

In conclusion, I would say that I am not in favor of indiscriminate section of the meatus for insignificant troubles. It is true that a great many reflexes may arise from contractions here, and that they can be in many cases relieved by removing them; but I am not disposed, like some, to attribute almost "all the ills that flesh is heir to" to contracted meatus. That there are some objections that can be raised to the operation, we cannot deny.

I have in two cases observed in patients upon whom I have operated, after many months interval, the formation of a chancre inside of the mouth of the urethra; but what connection existed between this and the former incision, of course no one can tell. It is probable that the location of the initial lesion here was dependent upon the thinness of the mucous membrane over the cut surfaces.

Dr. W. H. Bennett, of Brooklyn, has recently published (*Med. Record*, Jany. 22d, 1887) several cases of impotence and loss of sexual desire, following wide incision of the meatus, that were relieved by again uniting the urethral walls at this point. As far as I know, this is the first time that attention has been called to this fact.

Regarding the details of this rather simple operation—and the details are of decided importance—I would refer the reader to the text-books upon genito-urinary affections. To the work of Dr. F. N. Otis, in drawing attention of the profession to these important facts, we owe most that is now known of reflex disturbances, dependent upon contraction, congenital or pathological, of the urethral orifice.

ART. IV.—**Arsenite of Bromine in Diabetes Mellitus.** BY WM. J. CRITTENDEN, M. D., Fellow of the Medical Society of Virginia, etc., Unionville, Va.

In this article I simply propose to give my own experience, and not the theory or opinion of others.

On April 25th, 1886, I was called to see Mr. J. W. W., age 46. He had gone the rounds of all the Doctors. I was

at once attracted by a peculiar odor, resembling that of a child who had evacuated his bowels in his clothes. He was much emaciated; his skin was dry and harsh, and his bowels were constipated. Numerous boils were found on his back. His tongue was dry and furred; and he was unable to sleep at night from being terrified by the most frightful dreams. He furthermore said he was continually passing his water, and when he did not pass it, there was a burning, tingling sensation in the head of his penis. Everything he ate, he spat up, and he had a feeling of swelling in his stomach after each meal.

I took a sample of his urine to my office, and tested it with the following results: Reaction, faintly acid; sp. gr. 1046, loaded with sugar, as shown by Fehling's tartrated solution, as well as by Trommer's test. I tested it every day for a week, and found nearly the above at each examination!

Diagnosis, Diabetes mellitus.

Treatment.—(1) Clemens' solution of Arsenite of bromine in three drop doses, after each meal in water. (2) Bismuth sub-nitrate, thirty grain doses, stirred in a third of a glaas of water, and taken while eating. (3) Dover's powder, ten grains night and morning.

The object of the first was to reduce the sugar present in the urine. This was continued for two weeks. At the end of that time the sugar was much diminished, and at the end of a month it had entirely disappeared. I discontinued it then for 5 or 6 days, and found a slight trace of it. I then ordered it to be given for a week, and discontinued for the same length of time. This line of treatment was kept up for a month, and then discontinued altogether, without the least trace of sugar being detected in the urine.

(2nd.) The purpose of the bismuth was to relieve the full, puffed feeling proceeding from the indigestion of his food.

(3rd.) The Dover's powder was to cause his skin to act well, and to produce sleep at night.

On August 1st, all sugar had disappeared; there was no dyspeptic trouble; skin acted well, and he slept soundly at night. For the constipation of his bowels, I gave him a glass of hot water each morning before breakfast.

The dietetic treatment is of prime—of paramount importance. It is needless to state the line of treatment, which is

well known to every intelligent practitioner of medicine, and which is detailed in the books. The table devised by Prof. A. Flint, Jr. I find to be of great value in dieting patients. I make it a rule never to allow the patient to return to a diet having starchy or saccharine substances for a month or more, and then, only permitting him to use it in a sparring manner.

With strict dietetic precautions—and these must be rigidly insisted upon and enforced—together with the line of medical treatment which I have here advised, if the case be not of more than a year's standing, I believe the prospects of recovery to be fair. Since I commenced the practice of medicine, it has been my privilege to treat three cases with the most gratifying results, by the above treatment. I trust that the day may not be far distant when some *specific* may be discovered for this dreadful malady, and thus rid it of its *present terrors.*

ART. V.—**Baby Culture.—How to Avoid Having Weak, and to Secure Perfect Vigorous Children.** BY J. M. SCOTT, JR., M. D., Raccoon Ford, Culpeper Co., Va.

From results obtained from a number of cases, (one of which I will herewith report, occurring during the past ten years of my practice), I have become convinced that baby culture promises and gives as certainly beneficial results as any other culture; and as human life is the highest type of life on earth, so is the good to be effected here, greatest. This culture, like all others, should begin by preparation of soil before the planting of well-matured vigorous seed, and this planting like others, should be done at the right and proper time, when the ovum possesses its greatest amount of vitality, and the uterus is like land well prepared, having heat and moisture.

Spermatozoa should have age as well as nourishment before being transferred to the uterus. They probably require about two weeks to thoroughly mature, and I believe the ovum increases in vigor for one week after menstruation, after which time it begins to lose vitality and disintegrate.

Strong and healthy bodies will yield good products without fertilizing, but even they are sometimes susceptible of improvement. Frail and weakened bodies, like sterile and impoverished soil, should not be subjected to the risk of conception and drain of gestation without the proper help; else the contractors come to grief.

As to the rank of re-productive fertilizers, I would head the list with good albuminous food, combined with mental and bodily hygiene, and regular, but not excessive out-door exercise. Among the medicinal fertilizers are those used as preparatory. They are: Chloride of iron, chloride of gold, preparations of bark, and preparations of phosphorus and nux vomica. Fellow's compound of hypophosphites suits a large number of cases.

For early gestation, the best medicinal fertilizers are iron, potash, phosphorus, and ingluvin or lactopeptine.

For middle and later stages, rather avoid highly nitrogenous food. Laxative and diuretic preparations of potash and magnesia, good aperient food; quiet mind. Abstinence from nervous stimulants during the entire period of gestation will greatly lessen the disposition to convulsions and nervous diseases in children.

Whenever a woman shows exhaustion from household work and worry, she should be induced to rest and indulge in pleasant recreation. Even good farmers observe this principle in turning mares out to rest, for foaling.

Woman, like plants and trees, can bloom and bear to fatal exhaustion, which is plainly shown in some cases where child-bearing goes on in too rapid succession. Such, in my opinion, should not be allowed to conceive again, until they have been recruited and fortified for this four-fold physiological ordeal of passion pregnancy, parturition and lactation.

Case in point: Mrs. M., young, frail and consumptive; had cough and pulmonary hemorrhages, so persistent as to make me think she was beyond the hope of recovery. I treated her for phthisis in "the usual way," using fluid cosmoline instead of cod liver oil—thanks to Dr. Carpenter, of California, for the suggestion through the *Medical Brief.* The disease was arrested after twelve months' treatment, and she became pregnant, and gave birth to a very puny, frail

child, which died when a few months old. She became pregnant again, and bore a child after the same order as the first, only this might be termed a diminutive monster. It was visited as a curiosity. This also died a few months after birth. Being the family physician, I determined to try my system of baby culture with her, and went to work by giving advice to both husband and wife. As the husband was unusually healthy and well constituted, there was very little to be done for him, but the wife was treated upon the above plan.

Result: The largest and finest boy in two counties, now three years old.

By following out a like system of treatment as that suggested, sterility may be corrected in many cases.

Original Translations.

Antifebrine (Acetanilide), Its Nature and Therapeutical Action.

Le Progres Medical, of Jan. 15th, 1887, reports Drs. A. Cahn and P. Hepp, Clinical Assistants to Prof. Kussmaul, of Strasburg, as saying that antifebrine occurs as a white crystalline powder, destitute of smell, and having only a slight burning taste. It is slightly soluble in cold water (1 in 160), but dissolves readily in boiling water and alcoholic liquids, and more readily still in alcohol and ether. It melts at 237° F., and boils without alteration at 558° F. Acetanilide was discovered by Gerhardt, in 1852, and was obtained by the action of chloride of acetyl upon aniline. Acetanilide is a neutral substance, having neither acid nor basic properties. It is not affected by dilute mineral acids, and a solution of caustic potash acts on it slightly at the boiling point.

To divide it into its component parts, it is necessary to use alcoholic solutions of potash, or hot concentrated sulphuric acid, or, as is better still, to heat it with diluted acids in a sealed tube to a temperature above 212° F. By this re-action is obtained an aniline salt and acetic acid. Acetanilide is not the extreme limit of the dehydration of the acetate of anliine. By the action of chloride of zinc on acetanilide may be obtained, by condensation and elimination, the water of flavaniline, a coloring matter belonging, according to M. O. Fishcer, to the quinolide series. One might

be tempted to explain by one or the other of the above reactions the properties of antifebrine, and to try to find reasons for its action, in its transformation in the system into aniline, or a derivative resembling in its construction quinine and other alkaloidal febrifuges, artificial and natural. We will show farther on, our reasons for holding to this last hypothesis, inasmuch as that of a transformation into aniline is worthy of being taken into serious consideration.

Antifebrine is a violent poison to the lower organisms, the infusoria and others. It prevents alcoholic and lactic fermentation, and checks the decomposition of urine and albuminoid substances. It has, undoubtedly, antiseptic properties, and we have thought to use it in surgery, but the results obtained by Luecke are not very satisfactory.

The higher animals bear without inconvenience large doses of antifebrine. 'A medium-sized dog took by the mouth, one drachm without appreciable effect. On one occasion we saw it produce, in a dog of 16 pounds weight, general weakness, drowsiness and prostration, from which it was difficult to arouse him, but by the next day all these symptoms had disappeared. A daily dose of 45 grains killed a dog of 12 pounds after seven days. The symptoms produced began on the fourth day, and were weakness, especially in the hind quarters, vomiting, and on the last day, syncope and convulsions. The urine on the third day was highly colored, but contained no albumin or sugar.

Rabbits bore without trouble gramme doses, repeated for several days. In two cases only, there was produced a very marked narcotic effect, lasting 5 to 8 hours, and similar to the effect produced in these animals by chloral and urethan. Autopsies of animals dying from its effects, showed nothing except well marked venous injection of the meninges. Three grammes killed rabbits. Its effect upon the temperature of animals was insignificant.

Our experiments upon the effect of antifebrine on the blood pressure, have shown neither increase nor diminution to follow intra-venous injections of from 6 to 12 grains dissolved in hot water. The pulse was a little slower only.

As to the effect of antifebrine upon healthy men, we are convinced from experiments upon ourselves, that it has no appreciable effects in doses of one-half to one gramme. A patient suffering with chronic enteritis was able to take for more than eight days, quantities varying from 2 to 3 grammes a day, without even the least malaise.

Antifebrine is a powerful febrifuge. It is, moreover, ac-

cording to Sepine, a *nerve remedy* of great value. The results obtained by that eminent observer in the treatment of neuralgia, the tremors of multiple sclerosis (*sclerose en plaque*), and especially of the fulminating pains of locomotor ataxy are of great importance.

As an antiseptic, antifebrine appears to us to have a certain future, for it possesses all the qualities to be expected of a good antiseptic; that is to say, as a symptomatic remedy destined to combat only the fever element. Its administration in proper doses, produces surely, and without inconvenience to the patient, a considerable fall of temperature. The doses necessary to accomplish this end are not large enough to cause symptoms of poisoning (as is the case with quinine and salicylate of soda, for example). It does not disturb the digestive system; and it is a remarkable fact that up to the present, we have never seen it produce nausea or vomiting.

We have used antifebrine in 60 cases, as follows: typhoid fever, 29 cases; erysipelas, 6; pulmonary phthisis, 6; articular rheumatism, 4; pneumonia, 4; pleurisy, 2; septicæmia and pyæmia, 6; intermittent fever, 1; gastric fever, 1, and leukæmic fever, 1. We are not able as yet to say with certainty whether or not antifebrine possesses a specific action in this or that disease. Our experience with it in intermittent fever is not in accord with that of Krieger or Sepine, who claim to have been able by its means to stop the attack.

For want of suitable cases in which to try it, we have been obliged to leave the question in suspense as regards articular rheumatism, but all the recent communications of Riese and Landgraf give favorable accounts of it. In one case of this disease, we have seen it yield in three days to antifebrine. One of the authors cited has had 5 successes in 6 cases, while the other has cured 10 cases by its means. In many cases of typhoid fever, we have kept up the use of the remedy during the whole duration of the disease without any inconvenience, but also, without shortening the duration. As regards its administration, we have given it suspended in water, in medicated cachets, and dissolved in strongly alcoholic wines. The doses were varied from 4 grains to 15. We have never had occasion to give over 30 grains a day. The best results were obtained by keeping up the effects of a considerable dose with repeated smaller doses.

The action of the remedy is felt within an hour after administration. The skin is turgescent, the temperature falls and reaches its minimum between the third and sixth hour.

This fall of temperature, as is the subsequent rise, is very gradual. Almost always the pulse diminishes in frequency at the same time that the temperature abates; its tension increases, and several sphygmographic tracings showed a a pulse to be nearly normal during the time of the action of the antifebrine, which, before and after the period of remission, was dicrotic. Two or three times after the administration of the remedy, there is produced more or less abundant sweating, though generally it is less copious than that from antipyrine. This difference is, perhaps, due to the manifest action on the kidneys.

The general condition of patients is always notably improved during the period of remission. This was specially the case with typhoid fever patients. Their prostration was diminished; they took notice of what was going on around them, and asked for water. In the hectic fever of tuberculosis and pyæmia, the headache generally yielded to this remedy, and often the appetite returned. Rarely have we observed profuse sweating in phthisical patients, and never collapse. We have seen but one case of collapse, which was caused by a demi-gramme of antifebrine, in a typhoid fever patient. As to cyanosis, we have very rarely seen it produced; it appears to follow antipyrine as well as antifebrine, although, in a less degree, and we attach no longer any importance to it.

[The *Therapeutic Gazette*, on p. 123 of the February number, 1887, gives an interesting summary of the results of Krieger's researches with antifebrine. The literature of the subject, so far as I have seen, would indicate that antifebrine is the safest and best of the so-called antipyretics.—R. M. S.]

Morrhuol, the Active Principle of Cod-Liver Oil.

In a preceding number (Nov. 29, 1885), we called attention to M. Chapotreat's new product, isolated from cod-liver oil, of which it is the active principle, called *morrhuol.*

"To be able to replace so necessary a remedy as cod-liver oil, the administration of which is attended with so many difficulties and such bad consequences to the digestive functions, with a substance, the active principle of this oil, and possessing all its therapeutical properties, but presenting no obstacle to its administration, interfering in no way with the digestive functions, but rather favoring them, is a very appreciable advantage, and one upon which it would be useless to insist, so clearly does it reveal itself." Further trials of morrhuol have shown most clearly that it may be considered a precious remedy, and one fully worthy of being

added to the list of remedies for the diseases of the air passages, in which it has special action.

The regretted Dr. Gay expresses the following opinion after a trial of it at the Hospital Laënnec. "The results obtained, seem to confirm that morrhuol represents really the medicinal portion of cod-liver oil, without alimentary part. It rapidly modifies the general condition of the patient, by developing a large appetite. Phthisical patients experience a feeling of comfort; they eat and digest easily; they sleep; they cough and expectorate less." Identical results have been obtained at the Hotel-Dieu, in the services of one of our most eminent clinical professors. More recently, Dr. Pernod, after its use in this service in the penitentiary of the Rhone, has declared for morrhuol remarkable antistrumous properties. To compare its effects with those of the oil, he divided his patients into two classes. In one he continued the use of the oil; in the other, he gave the morrhuol, increasing gradually to six capsules a day.

After three months of careful comparison, Dr. Pernod does not hesitate to declare that the morrhuol acted with wonderful rapidity and effect. "I have," he says, "great faith in the modifying and re-organizing virtue of the active principles of cod-liver oil, thus isolated. I shall be happy if what I have said shall help to bring into general use this remedy, which, I consider, as one of the rare specifics of our therapeutic arsenal." The author then proceeds to give, in detail, descriptions of some cases in which morrhuol was used with satisfactory results. These cases are of interest, and of that nature which would indicate the use of cod-liver oil, if the patient could tolerate it.

One author, whose name is not given, but who is, I suppose, Dr. J. V. Laborde, the editor of the Journal, concludes as follows:—After so many cases and such constant results, it would be superfluous to insist upon the advantages of a remedy which can be of so much service to physicians in cases of serious troubles, complicated with intolerance by the stomach. The medium dose of five or six capsules a day should not be exceeded, but should be continued for some time, and without fear of any inconvenience.—*La Tribune Medicale*, Dec. 19 and 26, 1886.

Hygiene of Diarrhœa.

Dr. Dujardin-Beaumetz, in *Le Bulletin de Therapeutique*, says that it is necessary, from the alimentary point of view, to distinguish the abdominal fluxes caused by affections of

the large intestines from those resulting from affections of the small intestines. It is more especially in cases of the former that alimentary hygiene gives its best results.

First let the fact be established that in chronic diarrhœa, the only effectual treatment is an appropriate dietary. This regimen is based absolutely upon the use of the four following articles: milk, raw meat, peptones and meat powders. Milk holds the first place, and it is by the milk regimen rigidly carried out that chronic diarrhœa can be cured, and I recognize only one kind which does not yield to this, or another treatment, the tuberculous diarrhœa. I say rigidly carried out, because infractions of the exclusive milk regimen perpetuate the disease instead of curing it, and we often see among our troops returned from the extreme Orient, the sad consequences of infractions of the milk regimen. The sick man finds himself a little better, abandons the milk to return to it when the disease returns, but the diarrhœa is perpetuated, and the patient succumbs.

First then, an exclusive milk diet; afterwards the use of raw meat, or, as I prefer, meat powders. But it is necessary to proceed with great caution, and to proportion the amount of these to the condition of the intestine. Bazile Feris prefers the peptones to raw meat or meat powders, and makes his patients unite them with the milk diet. I think you might try the peptones, and then increase little by little the alimentation, being guided by the digestibility of the food ordered.

As laxative properties have been attributed to certain articles of food, so too have constipating properties been attributed to others. I will mention particularly the quince, the substances which contain tannin, for example, the artichoke; the white of egg has also been thought useful in these cases. All these means are, however, secondary, and play an inefficacious part in the cure of diarrhœa.

In the diarrhœa of infancy, it is milk too which is the great curer, and above all, that milk which is appropriate to the age of the child. Whenever you see this green diarrhœa among your little patients, be sure that it results from cold or errors in alimentary regimen.

It is well known that the constipating properties of milk can be increased by the addition of lime water, and this is one of the chief uses of lime water.—*Le Practicien*, Jan. 10, 1887.

Proceedings of Societies, Boards, etc.

RICHMOND MEDICAL AND SURGICAL SOCIETY.

[Reported by the Secretary, Dr. C. L. Cudlipp.]

January 25th, 1887.—President Dr. Hugh M. Taylor, in the chair. Drs. Wm. S. Gordon and Wm. B. Gray elected Vice-Presidents.

Convulsions—Uræmic or Hystero-Epilepsy.

Dr. Wm. S. Gordon reported the case of Mrs. S., who came under the care of Dr. John G. Skelton last fall. Then she was weak, pale and anæmic—her pulse being at times almost imperceptible, due probably to some arterial peculiarity. She was anasarcous and was generally nervous. Her spleen was enlarged and her bowels constipated. She had scanty discharges of urine, which had a high specific gravity, and at times was loaded with urates. Sometimes the urine contained crystals of oxalate of lime, and epithelium was always present, besides mucus and the so-called general debris. Albumen was sometimes present, but absent at others. Blood corpuscles were noticed once or twice. Hyaline and granular casts were also seen last fall, but these were not afterwards found. In years past, the patient had had hæmaturia. There was displacement of the uterus with adhesions, telling of a former pelvic cellulitis. The patient was hysterical, with decided hyperæsthesia of the general surface—particularly along the spinal region. The intercostal nerves were extremely sensitive. She said she had been troubled with twitchings of the eyelids and shooting pains in the eyeballs. She had expectorated a little blood at long intervals. There was no perceptible febrile movement. Her digestive functions were weak. She had had convulsions. Calomel, squills and digitalis were given and produced salivation, but removed the dropsy, which has never returned. Benefit was derived from acetate of iron with hypophosphites, although twitching of the eyelids and some of the muscles still continue. Occasionally, she has prœcordial oppression and a peculiar expression of the eye. Her urine is still scanty, although the morbid deposits vary —being sometimes entirely absent.

One day since new year set in, Dr. Skelton was hurriedly called to her in convulsions, and Dr. Gordon saw her at the same time. The convulsions presented a mixed character—hystero-epileptoform—and were repeated at intervals. Dur-

ing the intermissions, her intellect became nearly normal. During the convulsions, the heart's action became very rapid, the face flushed and the pupils dilated. Before Dr. Skelton arrived, a hypodermic of an eighth of a grain of morphia sulphate and a diuretic draught were given by the House Physician at the Retreat for the Sick; hot applications to the feet were also made. Dr. Skelton first administered chloroform, and afterwards enemata of chloral and assafœtida. The convulsions ceased during the early part of the night; but the patient was much exhausted, and complained of spasmodic seizures in the limbs. Restoratives were administered, and the patient since then has been free from convulsions. She is yet unable to sit or walk, and is about the same as before she was seen by Dr. Skelton.

February 8th.—**Tracheotomy in (I) A Case of Fibrous Goitre—Death; and (2) in Papilloma of Larynx—Success—Long Effort at Artificial Resuscitation.**

Dr. Joseph A. White reported two cases of "Tracheotomy" that presented interesting features—one on a man 35 years of age, whose breathing was suddenly arrested by the pressure of a fibrous goitre; the other on a child of 6 years of age, whose respiration also ceased suddenly from supposed impaction of a laryngeal polyp in the glottic aperture. This latter case also shows the value of prolonged artificial respirations in cases of apparent death by asphyxia, etc.

The *first case* was one of *fibrous goitre*, which had been under observation for two years, and in which, the goitre had much diminished in size by injecting it with a strong alcoholic solution of iodine. Later, cervical adenitis developed, and last spring the deep cervical glands on the right side having become so large as to cause considerable dyspnœa, and great suffering, the doctor decided to remove them. When the glands were exposed they were found to be tightly distended by a reddish black fluid, and were simply laid open, washed out with a solution of bi-chloride of mercury and allowed to heal up under iodoform dressing.

The patient was relieved of his dyspnœa and went to the mountains. In the early fall, he came back with the left chain of glands in a similar condition. These were at first aspirated, but as they would fill up again within 24 hours, they were laid open and treated as above. He left the Infirmary much improved, but returned in November with considerable pain in the neck, some dyspnœa and the goitre somewhat increased in size. The dyspnœa seemed to be due

to direct compression of the trachea by the goitre, and the advisability of a *partial* removal of the enlarged thyroid body considered, its *total* removal being, in the light of results heretofore, an unjustifiable operation.

The next evening, Nov. 12, although his breathing had been as good as usual all day, the dyspnœa increased very rapidly and within an hour the patient became cyanotic, lost consciousness and respiration was almost entirely arrested. Dr. White was sent for and reached the Infirmary after he had apparently ceased to breathe. With the assistance of Dr. O'Brien, of Alexandria, who was staying at the Infirmary with his nephew, and by the light of a small lamp held by a servant, the Doctor at once proceeded to open the trachea by cutting through the goitre. This proved to be a formidable operation, the trachea being fully three inches below the cutaneous surface, and pushed considerably to the left side. The tumor was very dense and vascular, and the bleeding under other circumstances would have been alarming. When reached, the trachea was freely incised and Frænkel's nasal speculum put in as a dilutor—the milled screw on the end being buried in the wound. This gives some idea of the thickness of the goitre. As soon as air entered the trachea the patient began to respire, and within an hour had regained consciousness. As no tracheotomy tube would reach the trachea, an extemporaneous one was made out of a large sized catheter. The patient slept well during the night, but died the following evening—24 hours after the operation—from bronchitis, which he had for some time. He was unable to expectorate the secretions, and their accumulation gradually choked up the small tubes, preventing access of air—respiration getting feebler and feebler until it entirely ceased.

Shortly after death, Dr. White removed the goitre with the larynx and trachea, which specimen he exhibited to the Society. The fibrous mass had almost encircled the trachea, and gradually squeezed the walls together at a point just above the artificial opening made when the operation was performed. The exact nature of the mass was not stated, Dr. White not having yet heard from the microscopist who had received a specimen for examination.

The *second case* was one which Dr. White had been attending two or three months for *papilloma of the larynx.* When he first saw the case, a child not yet six years old, the whole larynx was filled with a papillomatous mass resembling a small cauliflower, and the dyspnœa was distressing. He

cleaned out the larynx with a pair of Mackenzie's forceps, *per vias naturales*, and applied chromic acid to prevent recurrence. In spite of this it recurred twice, necessitating a second and third operation.

A very peculiar and interesting feature of the case was the development of two well marked *papillomata on the epiglottis*, of which there is no mention in laryngological literature. One of these specimens Dr. White sent to Dr. Geo. M. Lefferts, of New York; the other, and second one removed, he exhibited to the Society. This makes the case one of peculiar interest, as well as the fact that in a child so young as between 5 and 6 years of age, the laryngeal growth was readily removed *per vias naturales.*

The last time it was removed, was on Friday, January 21st, in the presence of Drs. Stover and Ross, and the larynx was so seemingly cleaned out, that Dr. White thought no further operation would be necessary. The little fellow breathed perfectly and was taken home in a more comfortable condition than after either of the other operations. The next day (Saturday) his mother reported him doing well. About 12 o'clock Saturday night the Doctor was sent for hurriedly, as the child was supposed to be dying, having suddenly begun to strangle. When he reached the house the child was livid and unconscious, and Dr. Franklin, surgeon to the Confederate Soldier's Home, who was with the patient, thought it was too late to be of service. Dr. White placed the child on a table and at once opened the trachea, although the child had ceased to respire and the pulse had disappeared from the wrist. As the lung did not respond when the trachea was opened, artificial respiration was instituted, and after an hour and a half's work, a feeble response was made to their efforts, and by four o'clock the little patient was breathing fairly well. At 8 o'clock he recovered consciousness and progressed rapidly to recovery. The same afternoon he was sitting up in bed playing with a book, but had high fever; temperature 102.5°. Under the treatment, this subsided in a few days, and he has now perfectly recovered, going about as before, but wearing the canula. When it is plugged up he cannot respire at all, showing occlusion of the glottic aperture. His mother says, on the evening of the operation he coughed, and almost immediately began to breathe with great difficulty, and the more he struggled, the worse respiration became.

Dr. White's explanation of the trouble was that there was in all probability a sub-glottic extension of the growth, and

that in coughing it was imparted into the glottic aperture, where it still is, from which he will remove it as soon as the child can be operated on.

A special point of interest is the favorable result attending the long continued and apparently hopeless efforts to keep up artificial respiration.

March 22d.—Place of Meeting every second and fourth Tuesday nights of each month changed to parlors of Murphy's Hotel, corner Broad and Eighth streets. (Regular physicians in good professional standing in their State and local societies, visiting the city, are welcomed.) Large attendance. Several visitors. Dr. Hugh M. Taylor, President, occupied the chair.

Trypsin—Solvent of Diphtheritic Membrane, Etc.

Dr. James Carr, of New York City, present by invitation, was requested to speak on this subject. He said that trypsin, known also as myopsin, the proteolytic ferment, etc., is the ferment of the pancreas, which digests albuminous bodies. It is perfectly innocent in its effect upon living tissues, but its specific power to digest or dissolve fibrin, some year or so ago, led the chemists of the well-known firm of Fairchild Brothers & Foster, of New York City, to make full investigations into the subject, and experiment with the agent. After thorough, painstaking investigation, this firm now offers the trypsin of their manufacture to the profession, with a good degree of confidence, as a solvent of the pseudo-membrane of diphtheria. To illustrate its solvent action upon fibrin, Dr. Carr mixed thirty grains of trypsin, as prepared by Messrs. Fairchild Brothers & Foster, with ten grains of bicarbonate of soda and one ounce of water. These were thoroughly mixed and warmed to about 95° Fahr. A piece of fresh fibrin about the size of an almond (obtained from whipped beef's blood) was put into the tube containing the mixture, and after about fifteen minutes, no fibrin was discovered on the service of a towel, through which the whole of the mixture containing the fibrin was filtered or strained, thus proving that, if the diphtheritic or croupous membrane is fibrous, the local application of trypsin will dissolve it. It can be applied to the diphtheritic membrane in the throat either with a brush or as a spray. The applications should be made as frequently and as freely as possible—several times within an hour, if the patients will allow—until all the membrane is dissolved.

Several members spoke informally on the subject, and in advocacy of the use of trypsin to prevent the necessity of

tracheotomy, etc. Dr. Carr was voted thanks for his demonstrations and remarks on the subject.

Reproducing Lath for the Manufacture of Artificial Limbs.

It having become known in this community that Mr. J. E. Hanger, the manufacturer of artificial limbs in this city, had made, within the past year or so, an invention of great practical value, whereby he was enabled with almost positive certainty to make an accurate and comfortable fit of an artificial limb to any stump of a few inches length—whether above or below the knee or elbow—was invited to exhibit a model of his apparatus or machine before the Society, which he did. He styles his instrument a "Reproducing Lath." He first takes a perfect plaster-cast of the stump. This cast is fastened into the machine, and serves as an accurate guide for cutting out the wooden socket of the artificial limb. He showed the working of the instruments. He said he had been a close student of the subject of making artificial limbs ever since the war, and this lath was the outcome of his studies and experiments. He had never been able to find any instrument like it, although he had examined the various claims in the Patent Office in Washington, as well as the reports of the patent offices of other nations. He had also studied out all the devices of other manufacturers of artificial limbs, that were not patented, as far as his opportunities would allow, but he had not found anything like it. For the most part, heretofore, fits had been made by trying on and gouging out the artificial socket, etc. It had been more or less of guess work—more or less of "let us see if this don't fit," etc. Now, when his work is done, he can say, "this *will* fit." A cast is the very best fit that can be made of a stump. Hence, a reproduction of this cast into the limb must be a perfect fit. Such a reproduction, Mr. Hanger claims his machine will make. And in proof of this assertion, he points with pleasure to the patients of some of the doctors in this city, who are now wearing his limbs, and voluntarily express themselves as being perfectly satisfied. Comfortable wearing—without friction, raising corns, or causing excoriations, etc.—is of prime importance in the construction of every artificial limb; and this is obtained solely through the accurate fitting of the socket to the stump.

Incidentally, he remarked, as a matter of interest to those who suffer with corns, bunions, etc., on their feet, that his instrument enables him to make "individual lasts," so that easy-wearing shoes, boots, etc., could be made. A great many people in this community were having such lasts made

for their sore feet, and the satisfaction was so great that he proposed at an early day to develop this matter into a commercial industry.

The doctors present, who had patients under the care of Mr. Hanger for artificial limbs, and for whom he had made boot and shoe lasts, stated that he had not overstated a single fact. The case of a Confederate General, who had lost a leg during the war, and who was now visiting the city from a Southern State, was instanced, in proof of the perfect and satisfactory fitting of an artificial limb by Mr. Hanger. This General had, before this, given "a fair chance" to several of the leg manufacturers of this country, and had been measurably pleased with one or two of the limbs he has worn, after having become convinced that a perfect fit could not be made. But now, with Mr. Hanger's recently-applied artificial limb, he says, "Nothing more is to be desired, except the real leg itself."

VIRGINIA BOARD OF PHARMACY.

The State Board of Pharmacy met in the rooms of the Virginia Mechanics' Institute, at Richmond, March 23d, and was in session three days.

The following named gentlemen compose the Board:—T. Roberts Baker, Richmond, *President:* J. W. Thomas, Jr., Norfolk; Edgar Warfield, Alexandria; Robert Brydon, Danville; E. R. Beckwith, Petersburg, *Secretary*.

Thirty-one candidates were examined, and twenty-four passed. The successful candidates will be given handsomely engraved diplomas, or certificates of registration, which entitle them to practice pharmacy in this State as long as they shall continue to pay to the Secretary of the Board the annual fee of one dollar.

The class this year was not only much larger than that of last year, but the candidates were much better prepared, showing that the law had operated as a stimulus to scientific culture. The standard of examination was higher than it was last year, and it is the intention of the Board to again raise the standard at the next examination.

The successful candidates were as follows: O. F. Blankenship, Fredericksburg; C. H. Goldsborough, Culpeper; W. J. Hackman, Clifton Forge; Geo. S. Starke, Orange C. H.; W. W. Friend, Richmond; Alexander Mahood, Richmond; R. W. McCargo, Richmond; L. A. Willis, Rich-

mond; L. Wagner, Jr., Richmond; Jos. T. Brand, Salem; C. C. Hudson, Roanoke; H. B. Mahood, Petersburg; W. M. Brown, Staunton; D. C. Bowman, Glade Spring; A. T. West, Norfolk; J. P. Fletcher, Harrisonburg; C. D. Fox, Roanoke; C. C. Ledbeater, Alexandria; R. C. Kent, Norfolk; H. Nebelung, Norfolk; A. P. Crosby, Norfolk; W. P. Norris, Waynesboro; J. M. F. Trotter, Danville; B. W. Palmore, Cartersville.

The annual report of the Secretary, required by law to be sent to the Governor and the Virginia Pharmaceutical Association, was read, and ordered to be published. The first year's practical operation of the law has developed some defects, to which attention is called, with the suggestion that the next Legislature be applied to for amendments.

Attention is especially directed to the section of the law which allows practising physicians to enjoy all the privileges of registered pharmacists, without either registering or paying any fees, and without examination or liability to any of the penalties. It is claimed that the State recognizes the fact that medicine and pharmacy are separate and distinct professions when they establish separate Boards of Examiners, and hence if the physician can practice pharmacy without a certificate from the Board of Pharmacy, the pharmacist should be allowed to practise medicine without a certificate from the Medical Board of Examiners. The education and training of the physician does not qualify him to practice pharmacy, nor does that of the pharmacist qualify him for the practice of medicine. Twenty-seven States now have pharmacy laws in operation, and only in Virginia does the law allow a physician to practice pharmacy without first passing the Examining Board.

Analyses, Selections, etc.

Lacerated Wound of Abdomen Successfully Treated without Antiseptics.

Dr. Ben. H. Brodnax, of Brodnax, La., was called to a boy, aged 16 years, who was thrown from a wagon while the mules were running away. His legs caught under the wagon, and he was dragged a hundred yards down a new cut road, filled with stumps and roots. His body, arms, head and legs were cut, bruised and scratched, and a gash

eight inches long extended "from two inches below the navel to the process of the hip bone;" a mass of intestines, the size of one's head, protruded, and was covered with rotten leaves, trash and mud. He was removed to his home, where his mother removed as much of the mud, etc., from the intestines as she could. Dr. Brodnax arrived an hour or so after the accident. Assisted by Dr. John D. Hammond, as much more of the blue mud as possible was cleaned off the bowel, but about half an ounce still adhered. The doctors "stitched up some pretty bad cuts in the intestines," and then placing the patient with his legs hanging over the back rounds of a chair (turned bottom-up on the bed), and with head downwards at an angle of about 45°, they carefully replaced the intestines in the abdominal cavity, and closed the wound with eleven stitches of common saddlers' silk. The boy made a good recovery, and was up and about in two weeks. No fever followed the accident. No antiseptics of any kind were used. The washing was done with branch water warmed. The costly appliances of the advocates of strict antiseptic measures may do in hospitals, but a country doctor cannot be expected to carry around with him a wagon load or more of antiseptics, appliances and himself on one horse.—*Miss. Val. Med. Monthly*, March, 1887.

Rectal Injections of Carbonic Acid and Sulphuretted Hydrogen. Phosphoretted Hydrogen.

Dr. E. H. Randall, of Ripley, Tenn., having noticed in a former issue (of *Miss. Val. Med. Monthly*) an account of Cornel's cure of lung diseases by enemata of these gases, does not see why (in March No.) these germicide injections should not be good for various intestinal troubles. As sulphuretted hydrogen, in its passage from the intestines to the lungs, permeates the whole system, why should it not destroy all malarial bacteria on its way? Trichina in pork may be destroyed by being smoked in this gas. Scarlet fever may be cured by fumigating the patient in this gas. Phosphoretted hydrogen is equally poisonous to germ life, and as well tolerated by the intestines as either of the two gases above named. To generate these three gases in the intestines, he suggests to feed the patient on a few raw sweet potatoes, but not enough to impair digestion. He has tried it. Sweet potato diet is curative of lax bowels.

Drugs not the Most Potent Curative Agents.

Dr. C. J. F. Meriweather, Tenn., mentions (*Miss. Val.*

Med. Monthly, March, 1887) some cases to sustain this proposition. First, a case of *catalepsy* in a childless married lady of 30 years, who had recurring comatose spells for three years—each spell lasting a week or more. She was healthy-looking, with normal respiration, pulse and temperature. Blisters, tonics, bleeding, purgatives, emetics, antispasmodics and alteratives had all been used in vain. The Doctor directed that when the next spell begun she should be ducked in a creek some 400 yards from her house. Her next spell began on a cold, windy day in November. Her husband took her on his shoulders (for she was as stiff as a log) to the creek and threw her in where the water was four feet deep. The shock of the cold plunge at once restored consciousness, and she actually outran her husband home. She was entirely cured. Case II. was a childless widow, *paralyzed two years*, and medicines had failed. The Doctor found her with normal respiration, pulse, temperature, appetite and digestion. He advised that she should be alarmed—to put her in a wagon and let the mules run away. This advise angered her mother, and quite a scene occurred. The Doctor left the house hurriedly. A few days afterwards, however, the family heard of the cure of the case of catalepsy, just reported, and they concluded to have a sham runaway with the patient in the wagon. The intended sham turned out to be a real runaway. The wagon was wrecked in the woods. The fright effectually cured the widow. Case III. was Mr. D., who had *hiccough* for a week. Every accessible remedy had failed, and the Doctor was sent for. Mr. D. had a large dog; so the Doctor took his mastiff along with him. Mr. D. was on a low bed, when the Doctor entered the room with his dog, when Mr. D.'s dog sprang on the Doctor's dog, "and for a dog.fight it would equal Waterloo." When the fight was over, Mr. D. was missing, but was finally found under the bed, "and never had another spell of hiccough during his life." Case IV. was a case of *itch cured by a terror of flies.* Mr. M. had long owed the Doctor a bill which he had often promised, but failed to pay. Finally he asked the Doctor to send him something for itch. Now was the Doctor's opportunity. He made a strong decoction of buzzard weed, which smells like carrion, corked the bottle well, and wrote the patient to wash well with soap and get a negro to apply immediately. In a week the Doctor called. The man said he was well of the itch, but when he applied the medicine his wife and son vacated his room and absolutely quarantined him, and that for four long days

and nights he had to fight green flies with bushes, for they seemed determined to "blow" him. On going to where his hands were at work, a faithful old servant took him to one side, and asked him with much feeling, if he was rotten. The next day he paid the Doctor what he owed him.

Cases of Skin Disease During Three Months of General Practice.

Dr. E. A. Neely, of Memphis, Tenn., (*Miss. Val. Med. Mthly.*, Mch. 1887,) in three months *general* practice, has treated, eczema, 7 cases, chronic urticaria, 4 cases, syphilodermata, 3 cases, acne—acute and chronic—2 cases, alopecia areta, 1 case, milium, 2 cases, herpes preputialis, 1 case—total, twenty cases within three months. Such an experience, if continued, would give the Doctor, in a *general* practice, annually seventy-five or eighty *different cases of skin* diseases, which is out of all proportion to the usual experience of the busiest of *general* practitioners in other sections of country.

For *eczema*, external treatment is demanded. When crusts have been removed by soaking them with oil and then with alkaline washes, he has derived the most satisfactory results from the following, although uniform results are impossible:

℞. Salicylic acid.
Oxide of zinc.....āā ʒiss.
Vaseline [or cosmoline].....ʒv.—Mix.

Or, ℞. Salicylic acid.....ʒj.
Starch.....ʒiij.—Mix.

Chronic urticaria. If the characteristic wheal is not discoverable, a little irritation develops it, with the peculiar sensation of pricking, burning and stinging. This disease is connected with a low temperature. Convinced that the disease is nervous in its origin, he gives a solution of twenty grains bromide of potassium with four drops of liquor potassæ arsenitis, three times daily. As a soothing application this seemingly paradoxical prescription is used:

℞. Glycerole of capsicum.....℥j.
Bay rum.....℥viij.—Mix.

Syphilodermata. The syphilitic color is not always characteristic. The earlier lesions are of a pinkish red, although of a more subdued duller tint than other exanthems. Treatment the same as for syphilis.

Acne. His experience inclines him to believe it to be dependent on a digestive derangement, and not the result of a

reflex of a nervous disturbance. Where the formation of pus is abundant, he has used sulphide of calcium with decided benefit. Arsenic is beneficial when the inflammatory process is slow. Local measures must be soothing or stimulant, according to the case.

For *alopœcia areta*, everything should be done with a view to stimulating the functional activity of the hair follicles. For *milium*, he recommends nothing outside the text-books. For *herpes preputialis*, he sprinkles equal parts of tannin and bismuth on borated cotton, and applies to the vesicles.

Origin and Treatment of Typhoid Fever.

Dr. M. C. McBride, of Lebanon, Texas, says (*Miss. Val. Med. Monthly*, March, 1887) that scientific investigation has failed to establish the etiological identity of the specific poison of typhoid fever, but he accepts the theory of bacterial origin. Having no specific remedies for the disease, we have to "meet indications" as they arise. When the temperature is high, cold water applications are his favorite. He offers no new suggestions as to treatment. He says, however, if cold fails, from twenty to thirty grains of quinia, in one dose between midnight and early morning generally reduces the temperature to normal. If this fails, he gives ten drops tincture of digitalis every two hours, except in the early morning.

Mumps Complicated by Meningitis—Death.

Dr. J. C. Shepard, of Winchester, Tenn., says (*Nashville Jour. Med. and Surg.*, March. 1887) that in February last he was requested by Dr. T. C. Murrell to assist him in a case of complicated mumps. J. W., during the first week of his suffering from uncomplicated mumps, was induced to leave school, but refused to stop study, and continued his daily walks regardless of weather. At the end of the week fever had subsided and swelling of the glands of the neck was disappearing. On Thursday 17th double orchitis had developed; both testicles were enlarged and extremely painful; temperature gradually rose till on Friday evening it had reached 106°. High temperature continued Saturday and Sunday, with pain in the head, intolerance of light, contraction of pupils, delirium, hot head, flushed face, rejection of all nourishment, restlessness and prostration. In proportion to the increase of the brain symptoms was the decrease in the orchitic inflammation. This stage lasted three days,

with remissions in the morning and exacerbations in the evening. On Monday morning there was decided subsidence of all symptoms of excitement. The stage of effusion had set in, although the patient was apparently better and took a little nourishment. In the evening the pulse became rapid but soft; skin cool; patient dull and restless, with irregular convulsions. He applied cold to the head, counter-irritation along his back and side, depletion by the bowels —blood-letting being unwarranted. Internal administration of the bromides and tincture of aconite, as anodyne and sedative, with morphia and bromides to control convulsions, were of no avail, and early Tuesday morning the patient died.

Two Cases of Amputation of Thigh—Recovery.

Dr. C. S. Briggs, in a clinical lecture at Vanderbilt University, Nashville, Tenn., reports the case of (*Nashville Jour. Med. & Surg.*, March, 1887) James Dawson, aged 42 years, who had suffered for some months with strumous synovitis of the right knee. Some weeks previous pus was evacuated by free incision. In spite of antiseptic dressing and injections, the joint became rapidly worse. Amputation at the junction of the middle and lower third was decided upon, which was done with antiseptic precautions. Esmarch's bandage was applied, lateral flaps were made by transfixion, and limb removed. Catgut ligatures were used—all dressings were thoroughly antiseptic; and without any bad symptoms, the patient recovered.

Amputation on Account of Hæmorrhage.—A colored woman received a compound comminuted fracture of both bones of the left leg. At the hospital the limb was properly dressed and encased in plaster splints, with fenestrum at the open wound. Progress was very unsatisfactory; diffused cellulitis supervened; the wound became gangrenous, the limb immensely swollen—swelling extending above the knee—and the patient suffered intensely. Ulcers developed, and hæmorrhages occurred, and three weeks after the accident, the amount of hæmorrhage endangered life, when the limb was amputated above the knee-joint, by the modified circular operation. Antiseptic precautions were observed. Patient returned home in seventeen days after the operation entirely recovered.

Compound Comminuted Fracture of Cranium, Extensive Injury of Brain—Recovery.

J. M., Irishman, healthy laborer, aged 35, received a blow

from the sharp edge of an axe on the cranium, near the crown, an inch and a half to the left of the median line, making a clean incision of the scalp and outer table of the parietal bone, to the extent of about four inches; comminuting over a much larger extent the diplœa and inner table, driving fragments through the membranes, causing extensive contusion and laceration of the left hemisphere. At two o'clock on the day of the accident, when the writer (Dr. S. Eagan, Dallas, Texas, in *Texas Cour. Record Med.*, March, 1887) was called in consultation with Dr. McMahan, of Richardson, Texas, no bad symptoms were present, and the intellect was unimpaired. All fragments of bone and foreign bodies were at once removed; the wounded surface was thoroughly asepticised by prolonged irrigation with solution of bichloride of mercury (1 to 1,000), dressed with lint saturated with the same solution. By occasional irrigation through the dressing, drainage was affected. Without a single bad symptom or the slightest impairment of intellect, the patient rapidly recovered, without the administration of any constitutional remedy, save a quarter grain doses of morphia every four hours for the first two days. The doctor relied solely upon asepticism, with a generous supply of diet.

Imperforate Hymen—Retained Menstrual Blood in the Vagina and Uterus—Operation—Recovery.

Dr. H. C. Ghent, of Belton, Texas, reports (*Texas Cour. Rec, Med.*, March, 1887) the case of a lady of apparently good health, strong and robust, who had arrived at the age of twenty-one without having menstruated, but since her fourteenth year, she had an unpleasant feeling, occurring with monthly periodicity, which was readily relieved by a few hours' rest and the administration of stimulants. In this condition she was brought to the writer for treatment. The uterus was enlarged, but there was no tenderness over any part of the abdomen. Introduction of the finger into the vagina was arrested by what appeared to be an elastic tumor, which protruded forward to the labia. Fluctuation was detected by palpation, and by vaginal and rectal examinations. After thorough examination, the writer was satisfied that the enlargement and fluctuation were due to enlarged uterus and vagina, which were distended by retained menses, the result of imperforate hymen. Dr. Ghent decided to operate and withdraw the contents by rapid evacuation through the vagina, as advised by Emmet. Having previously evacuated the bowel by castor oil and enemata,

the patient was anæsthetized. A vertical incision an inch long was made through the hymen by means of the scissors. The discharge of a tar-like substance immediately began, becoming thicker, till finally the substance had to be removed with a spoon. The discharge was odorless, and amounted to seventy-six ounces. The vagina and uterus were now thoroughly washed out with carbolized warm water, after which a solution of the bichloride of mercury (1–2000) was used. The cut and lacerated edges of the hymen were dusted with iodoform. Sims' glass vaginal dilator was introduced, and a T bandage applied. All of the parts were extremely patulous, and the walls of the uterus and vagina were much changed in appearance. The patient progressed rapidly towards recovery without constitutional disturbance. For several days the urine was drawn with a catheter, and her bowels were moved with castor oil on the fifth day. The dilator was removed only to use vaginal injection of warm carbolized water. In a few days the patient was discharged, and has menstruated regularly since, without pain or discomfort.

Dual Conception—Different Fathers.

Dr. J. B. W. Nowlin, Nashville, Tenn., says that in April, 1863, he was summoned to a colored woman, who had given birth to twins, and whose uterus had been inverted by the attempts of the midwife to extract one of the placentæ. The doctor reduced the inversion by the usual methods. The peculiar feature of the case was the fact that one of the twins was pure African and the other a bright mulatto, bearing evidence of Caucasian parentage. Upon being questioned, the mother admitted having had intercourse with a white man the day following the same act with her husband. There were two separate and distinct cords and placentæ. The question arises, were the conceptions the result of copulation with the white man, one child partaking of the characteristics of the mother alone, and the other of both parents? Or, were there two distinct and separate conceptions, at the different times of copulation? which question he does not answer.—*South. Pract.*, March, 1887.

Contusion and Extensive Laceration of the Testes—Recovery.

On the 12th of October, 1886, Dr. Durrett, of Savoy, and Dr. King, of Bells, were called to see Mr. K , of Bells, Tex., who, while ginning cotton, was caught in the machinery in such a manner as to have his scrotum torn from its base and

stripped to the root of his penis, exposing the testes, both being severely contused and lacerated, the left more than the right. Treatment, with the view of saving both the scrotum and testes, was instituted, and continued till the 17th, when the writer was called in consultation. Patient was completely prostrated, and septicæmia was well pronounced; the entire scrotum was sphacelated, and the left testicle was completely disorganized. The parts were soaked in a strong solution of carbolic acid; the scrotum and the subjacent dead areolar tissue and left testicle were dissected away, and the entire surface was irrigated with solution of bichloride mercury (1–1000). The remaining testicle was dressed with carbolized vaseline, and constitutional medication, with good diet, advised. Ulcerations that subsequently appeared on the wounded surface were healed by the following application:

℞. Acid boracic.....ʒ iv.
Oil cageput.....fl. ʒ iv.
Ointment zinc oxide.....ʒ iv.—Mix.

With this dressing, the wound healed nicely. Nature threw a covering over the exposed testicle, the upper extremity of which had been drawn in apposition to the external abdominal ring. In thirty-six days after the accident, the patient returned home perfectly recovered. A constant tendency of the penis to erection was one peculiarity of the case.—*Tex. Cour. Rec. Med.*, March, 1887.

Vesico Vaginal Fistula—Operation Successful After Five Failures.

Dr. Thos. Burbank reports (*N. C. Med. Jour.*, March, 1887) a case of successful operation for vesico-vaginal fistula, after five successive failures. The case is remarkable only in the fact of the doctor's perseverance, who had, as he expresses it, "determined to do or die."

External Œsophagotomy—Death.

Dr. E. Burke Haywood, Raleigh, N. C., reports (*N. C. Med. Jour.*, March, 1887) the case of J. P. Pool, aged 24, inmate of the North Carolina Insane Asylum, in whose œsophagus a foreign body lodged opposite the third costal cartilage. External œsophagotomy was necessary for its removal. Dr. Haywood was assisted in the operation by Drs. Lion H. Rogers, Fuller and Hubert Haywood. Beginning at the top of the thyroid cartilage, an incision four or five inches long was made on the left side, along the anterior

border of the sterno-mastoid muscle. Through this incision the physicians were unable to dislodge the obstruction; a probang saturated with glycerine, was applied, and the patient was left in charge of the house surgeons. The foreign body was subsequently passed by the bowel, and consisted of two suspender buckles and straps with rings attached, forming a disk one and a half inches long, one inch broad, and one-half an inch thick. Patient died at the end of a month and ten days, from septic infection.

Ovariotomies.

Cornelius Kollock, A. M., M. D., Cheraw, S. C., reports some cases (*N. C. Med. Jour.*, March, 1887).

Case 1st.—Mrs. M. M., aged 32, multipara. The operation was performed February 20, 1885, Drs. Prince, Miller, Wilson Jones and Waddill assisting. The incision extended from the symphisis pubis to above the umbilicus. The tumor consisted of two large cysts, and many smaller ones, each of which contained fluids differing in appearance from that found in the others. Patient recovered in four weeks without a bad symptom. The cysts, with their contents, weighed twenty-eight pounds. *Case 2d*: Multipara, aged 46; a multilocular cyst of the right ovary was diagnosticated, and the operation performed December 12th, 1885. The patient died three days after the operation, from uræmic poisoning. *Case 3d:* Multipara, aged 36. The operation, occupying thirty-eight minutes, was performed January 21st, Drs. David, Woods, Palmer and Smith assisting. Recovery. *Case 4th:* Miss E. H. P., aged 31, required Battey's operation, which was performed February 8, 1886, Drs. Wheeler and Anderson assisting. Both Ovaries were successfully removed, and rapid recovery ensued.

Urethral Fistula in the Male.

Sam'l Logan, M. D., Emeritus Professor Tulane University, La., in a treatise on this subject (*New Orleans Med. and Surg. Jour.*) relates the following cases:

Case 1st: Colored laborer, aged 35, upon whose urethra, in front of and near the perineum, there had developed, as a result of stricture, a hard, painful tumor, which had been pronounced cancer by another physician. Coincident with the relief of the stricture, the tumor disappeared. *Case 2d:* In which urethral fistula had developed near the meatus, as a result of stricture and obstinate gonorrhœa. By cutting

into the urethra, through the fistula, the two canals were made one, and a cure effected. *Case 3d*. Fistula due to gonorrheal stricture—improvement is proportionate to the dilatation: The *fourth* was a case of extravasation that had existed for some days before medical advice was sought. The doctor found the patient *in articulo mortis.* Free incision of the parts was of no avail, and patient died in a few hours.

Croupous Pneumonia; Etiology and Treatment.

Dr. R. P. Huger, of Anniston, Ala., says (*Ala. Med. and Surg. Jour.*, March, 1887) that pneumonia is the most frequent serious disease encountered in Alabama, and causes more deaths than any other disease. The microscope threatens to attribute it to the coccus; but in reality the coccus of catarrhal pneumonia has not been discovered. Klebs says the coccus has a gelatinous-like capsule which may surround several cocci, or it may be entirely absent. When injected into mice, cocci produce pneumonia and pleurisy. Dr. Huger, however, does not believe that cocci are necessary to produce pneumonia. He has often seen the disease when it would be almost impossible to conceive how the coccus could have had any causative agency whatever. He believes pneumonia is a cold-weather disease, and that those cases occurring in summer can be traced to chilling. He admits that there may be pneumonia epidemics; but it is as easy to attribute such epidemics to "an epidemic constitution of the atmosphere" and individual susceptibility as to the ubiquitous cocci. It is a mistaken statement by Flint that in the South pneumonia especially affects the negroes. More of Dr. Huger's patients have been previously healthy and robust, and between the ages of 20 and 25 years. But persons who have had attacks of malaria during the previous summer and autumn frequently die of pneumonia contracted during the following winter or spring.

As to *treatment*, venesection, according to Niemeyer, ought to be used only in the following conditions: (1) Hitherto healthy robust subject, disease of recent occurrence, temperature over 105° F., and pulse more than 120 a minute. (2) When collateral œdema in portions of the unaffected lung endangers life. When great frequency of respirations at the commencement of attack cannot be traced to fever, pain, and extent of inflammation alone, as soon as serous, foamy expectoration appears, with 40 or 50 breaths a minute, and when the rattle in the chest does not cease for awhile

after coughing, bleed freely at once. (3) When symptoms of pressure upon the brain—not headache and delirium, but stupor or transient paralysis—appear, bleed. Aconite and gelseminum are also very efficient cardiac sedatives, but are neither so prompt nor certain as veratrum viride. The effects of veratrum have been compared to those of tobacco, which may be controlled by combining it with ginger. Digitalis, as a cardiac stimulant, is good in the latter stages of the disease to overcome heart failure. The vast preponderance of evidence shows these drugs to be antipyretic. The wonderful range of action of quinia renders it of inestimable value in every stage, and in cases complicated with malaria it is the key to success. In the inflammatory first stage, it is antipyretic, lowers the pulse, removes local congestion, and sometimes aborts the attack. In the second and third stages, it is tonic and antiseptic. Ipecac and other mild expectorants and diaphoretics are probably beneficial. Ipecac has undoubted power to control hæmoptysis. But the integrity of the stomach must be maintained at any cost. Only the most digestible and nutritive food, in small quantities and at short intervals, should be allowed. Carbonate of ammonia is a very important agent—whether by its stimulating or aplastic properties. In *bilious pneumonia*, described by Dr. Copland in his *Medical Dictionary*, especially is it valuable. In fact, Dr. Huger uses it among the first remedies in nearly all cases, and keeps it up with highly favorable results; when it begins to irritate the stomach and bowels it is temporarily discontinued. The muriate of ammonium may be as good. Alcohol is indicated when the tongue is dry and the pulse is becoming feeble; it is criminal to withhold it in distinctly typhoid or adynamic pneumonia. It is idle to say it is not a food; clinical observation proves it to be such—whatever may be the results of chemical experiments. Antipyrin may be used when quinia fails to reduce temperature. Collapse is said sometimes to ensue from its rapid reduction of temperature, but he has not heard of fatal effects. The average adult dose is 15 or 20 grains, in a solution of simple elixir and water, to be repeated every hour or two until desired results follow. Opium is conceded to be the most potent of drugs.

As to local applications, heat affords an appreciable relief and a general sense of comfort, and relieves pulmonary congestion, as well as cold applications. Cotton wool packing of the chest does good. Counter-irritants and blisters are extremely important. Apply the blister when the pain and

dyspnœa do not yield to moderate doses of morphia and the lesser counter-irritants. A blister does not increase the fever.

Antiseptic Surgery in Private Practice.

Dr. Sollace Mitchell, of Jacksonville, Fla., confesses (*Ala. Med. and Surg. Jour.*, March, 1887) that he is enthusiastic over antiseptic surgery in private practice. He reports a number of cases which he thinks sustain his enthusiasm. But all his points are illustrated by his report of a case of operation for strangulated hernia, in which he shaved the pubes, washed the parts with soap and water, soaking his instruments in a 1 to 40 solution of carbolic acid. He then washed his hands and the parts to be operated on with a 1 to 500 bichloride solution, and isolated the parts with towels wet with 1 to 1,000 bichloride solution. Next he took his knife from the carbolic bath and performed the usual operation—the wound being occasionally washed out with fresh bichloride solution. The wound was sutured with catgut and a rubber drainage tube inserted. Iodoform was dusted over the wound, and then a piece of dry gauze, impregnated with naphthaline and alcohol, was placed over the wound, and this covered by a gauze which had been soaking in the bichloride solution. On the third day, the dressings were removed, the wound was washed with bichloride solution while the drainage tube was being taken out, iodoform was dusted over, and it was quickly covered with dressings as before. And yet, with all this, the temperature rose 100.5° on the second day, and the patient made a good recovery! [Many a country doctor has had as good a result without antiseptics. Consult Dr. Brodnax's case, page 48 of this issue.] He regards naphthaline as especially protective against erysipelas. Sponges must never be used but once until again rendered aseptic.

Ligation of External Illiac for Femoral Aneurism.

Dr. J. McF. Gaston, Atlanta, Ga., in a surgical clinic (*South. Med. Record*, March, 1887), spoke of a case in which he operated upon one, whose femoral artery had previously been successfully ligated for popliteal aneurism. Aseptic precautions were observed; Czerny silk and catgut ligatures were used, and aseptic dressings applied. On the seventeenth day after the operation, the conditions were such as to warrant success.

Mental Dyspepsia.

Dr. Reunette E. Fuller, of Macon, Ga., begins a paper on Neurasthemia (*Atlanta Med. and Surg. Journal*, March, 1887) with the statement that "thought is a direct product of the disorganization of a portion of the human brain." In mental dyspepsia the stomach has ceased to furnish the brain with sufficient material to equal the waste caused by the intellectual effort. Nervous tissue feeds upon itself. The labor performed by the nervous tissue is incomparably greater than any other in the human body. He then describes a presumed case of cerebral exhaustion or anæmia, points out the danger of the resort to stimulants, and then of insanity. In these cases of brain exhaustion, the patients unfortunately generally seek for fat and muscle forming elements of food, and an almost entire absence of nerve building staples. The proper food for mental dyspeptics should contain the same soluble chemical elements that enter into the constitution of the nervous tissue.

Sympathetic Iritis.

Dr. S. Latimer Phillips, of Savannah, Ga., reports (*Atlanta Med. and Surg. Journal*, March, 1887) a case of iritis developed some days after removal of the offending eye to protect its fellow—a rather novel experience. Also a case illustrating what danger an eye is exposed to when the other has been lost from a wound through the ciliary region and still retained. The Doctor's experience has taught him that an eye wounded so as to render it painful and useless should, as a rule, be removed as a protection to the good eye.

Three Congenital Strictures of Urethra.

Dr. W. G. Jameson, of Rusk, Texas, reports (*Daniel's Med. Jour.*, March, 1887) the case of a boy, ten years old, who had passed a "spray-like stream" from birth. Examination revealed three successive strictures, each of which was divided at one operation, and the boy passed a full, bold stream. Finding the use of bougies after the operation too painful, dependence was placed upon the stream of urine, frequently voided, as a dilator, or rather, to keep the urethra from contracting again. The result was altogether satisfactory.

Footling Presentation and Prolapsed Cord.

Dr. R. H. Eames, of Rice's Crossing, Texas, was called to a case with such presentation, with sacro-posterior position.

The left foot portruded and the right one was just within the vulva. The engorged convoluted cord prolapsed some 12 or 18 inches. No uterine pains. Failing to replace the cord, he gave ergot and kneaded the womb, but no contractions followed. He then pulled down the right foot on a level with the left, and grasping both feet used traction, and also pressure with left hand from above. The child was born to the navel. Efforts failed to bring it down further. The cord then became pulseless. Gave chloroform and brought down the shoulders. But the chin here got extended and behind the symphysis. Finally, with index and middle fingers on the forehead, partial rotation backward was secured, and then he got his finger in the fœtal mouth, completed rotation, and the child was born dead. *Daniel's Med. Jour.*, March, 1887.

Boracic Acid for Chronic Suppuration of Middle Ear.

Dr. R. D. Palmer, of New York city, reports a case (*Ala. Med. and Surg. Jour.*, March, 1887) of chronic suppuration of the middle ear, of thirty-five years' duration, relieved by the use of boracic acid. The discharge began from unknown cause in the man, aged 36, when a year old, and continued without interruption till October 2, 1886. After thoroughly cleansing the tympanum, finely powdered boracic acid was blown into the ear until the perforation in the membrane was entirely closed with it. This application was repeated every morning for a month, and then every two or three days. No discharge since December 14th.

External Treatment of Eczema; Herpes Facialis and Herpes Progenitalis.

Dr. Henry Wile, Lecturer on Dermatology, Atlanta, Ga., has been publishing some lectures on skin diseases in the *Atlanta Medical and Surgical Journal*, the subject of the lecture in the March No. being as given in the title above. While the lecture is a good one for students, it contains nothing that is not stated in the usual books of reference.

Abortion after Removal of Cervical Polypus.

Dr. W. H. Lancaster, of Coleman, Texas, removed by torsion, without difficulty, a large polypus from the cervix uteri of a lady, aged 27 years, married five years without child. After operation, the womb was noticed to be enlarged, and the suggestion of pregnancy was made to the family, which

suggestion was not credited; but there was no nausea, nor did the breasts indicate pregnancy. Some two months later, the patient aborted a 3 or 3½ months' fœtus. The case is not worth the space given the report in *Daniel's Medical Journal*, March, 1887, except that the Doctor is threatened with malpractice suit. The idea of such a suit, under the circumstances stated so fully by the Doctor, would be ridiculous.

Copper Wire Band Curative of Neuralgia.

Dr. W. E. Scott, of Springfield, Mo., reports (*Progress*, March, 1887) the case of a man, aged 70, who had been troubled with severe facial neuralgia some thirty years. Hearing of the remedy from a layman, he applied a closely fitting copper wire to the skin about the neck, and had it constantly worn. After twelve hours, the patient had no severe trouble, and after about ten days' trial he was free from his ailment. If the neuralgia affects the trunk, etc., wear the copper wire around the waist.

Cancer of Stomach, etc., Causing Mediastinal Tumor; Contagiousness of Phthisis.

Progress, for March, 1887, reports a clinical lecture by Dr. Wm. Pepper, of Philadelphia, Pa , detailing post-mortem of a man, aged 31. The body was emaciated and intensely jaundiced. The eroded sternum was easily fractured and attached to a large mass in the anterior mediastinan, and adherent to the thoracic organs. A similar mass was at the cardiac extremity of the stomach, involving transverse color also. The liver, mesentery and left kidney were likewise carcinomatous. The gastric ulcer being near the cardiac orifice explains the absence of vomiting. The subject was a grocer, aged 31, whose former occupation required heavy lifting. He drank much beer and whiskey—the latter often on empty stomach. Pain, not very severe, began in the stomach about a year ago, and was not influenced by eating. No vomiting. Biliary obstruction and jaundice developed some months later. A valvular heart murmur was most distinctly heard at the angle of right scapula. Diarrhœa set in shortly before death.

Case II.—Farmer; age 42; married 17 years; wide died six months ago of consumption. Dampness of house, with exclusion of light, renders a house especially favorable to develop this disease, if the patient has any tendency to it. The case under consideration Dr. Pepper thinks due especially to this cause, and not to contagiousness.

Radical Cure of Inguino-Scrotal Hernia by Different Methods. —No Antiseptics.

Dr. J. P. Thomas, of Pembroke, Ky., ex-President of Kentucky State Medical Society, etc., reports (*South Western Med. Gazette*, March, 1887), the plan of cure by different methods of three cases of external oblique inguino-scrotal hernia. *Case I.* Stable keeper, aged 40; hernia caused by horse kick on abdomen, twelve years ago. Some months since, he was again kicked by a horse, the hoof striking him on the nut of a truss he was wearing, causing a deep sulcus just above the ramus of the pubic bone, and directly over the inguinal opening. A rapid cure of the hernia resulted. *Case II.* Age 62. Hernia on both sides, caused by jumping from a high fence. A double Chase's truss, without padding, was applied, and worn for six weeks. It established inflammation in the tissues of the inguinal opening, and closed it by effusion and adhesion, and a radical cure resulted in about three months. *Case III*, colored, aged 38, hernia for eighteen years, due to heavy lifting. Representing himself recently as having colic, he was given a large dose of calomel, followed by castor oil, which, of course, did no good. The Doctor saw him on the third night of suffering, and found the scrotal tumor as large as a child's head. Strangulation had existed so long as to leave no hope in taxis. Though the surroundings were most unsanitary, and with no antiseptic precautions, the usual operation of herniotomy was begun, but the entire sac required splitting up, and the bowels were replaced from the scrotum into the abdominal cavity. Most probably a radical cure will result. The patient was doing well when the doctor wrote. Wounding the epigastric artery is one of the dreadful dangers in operations for strangulated hernia. Sir Astley Cooper's advice is ordinarily good: —"Cut directly upwards from the centre of the ring;" but this is a very dangerous cut where the the incision has to be extended, because of the escape of blood into the abdominal cavity. A modification of Wood's operation was required to substitute invagination. Not until the fifteenth day after operation were his clothes changed, and he removed from his filthy straw bed, soiled by blood, urine, and bowel discharges, to a cleaner one. And yet there never was a symptom of septicæmia, pyæmia, or peritonitis. The odor from the unclean suppurating wounds all these fifteen days was very offensive, although the pus was always "laudable" in appearance. The Doctor has never believed that there was anything in antiseptic surgery over and above the

cleanliness it enjoins. But if one case can prove anything, this one proves that even ordinary cleanliness is not essential to successful surgery.

Dermatological Notes.

Dr. J. Clark M'Guire, of Louisville, Ky., compiles very well some practical notes on this subject for the March number of the *South Western Medical Gazette.*

Arsenic.—Dr. G. H. Fox condemns the giving of arsenic in nearly every form of skin disease, as irrational and harmful. Dr. M'Guire believes more harm than good has been done by its use. He prescribes it only to stimulate the skin —especially the mucous layer, as in psoriasis, pemphigus, and chronic scaly eczema. He has never seen the slightest benefit from it in any form of acne or alopecia.

Syphilis.—Andronico excises the chancre to abort syphilis, and reports four cases. Zarewicz has excised the chancre in fourteen cases in from six hours till twenty-two days after its appearance in the different cases, and yet constitutional symptoms occurred, but were modified. Morrow says of the records of 126 excisions of the chancre, 123 failures and three successes resulted. Excision is useless as an abortive.

Non-venereal syphilis does not occur, but many cases of syphilis cannot be easily traced to a known infection. Taylor reports a case inoculated by a tatooing needle, and another case—a lady—contracted the disease on her lip by kissing her sweetheart. Kiine reports instances of thirty married women, nine husbands and two infants who contracted syphilis from a diseased midwife. Dr. M'Guire reports seven cases under his observation where the disease was diagnosed by the eruption alone, without history of infection, and cured by antisyphilitic treatment.

Acne in the female is said to be due to hyperæmia and irritability of the uterus, and Hutchinson reports six out of seven cases cured by the hot vaginal douche. Many cases *in the male* have recently been reported as cured by means of the urethral sound.

Treatment of Warts.—A number of cures have been reported by the internal daily use of sulphate of magnesia—from a few grains to a ʒiss. Some Frenchmen report cures in fourteen days by the internal use of arbor vitæ. Dr. M'Guire says after applying mono-chloro-acetic acid; [$C^2 H^3 ClO^2$ is formed when a current of chlorine is passed into acetic acid, heated to 100°, and containing a small quantity

of iodine. *Wurtz's Elements of Chemistry*, by Greene. 1884. J. B. Lippincott & Co.,] the warts disappear.

Ichthyol is obtained from a bituminous sulphurous mineral from the deposit of fossil fish. Stelwagon found it of benefit in about half the cases of acne and acne rosacea, but of no use in eczema, lupus, and favus. Unna highly recommends it (ten per cent. ointment locally and five to ten drops daily internally to children) in urticaria, herpes and herpes zoster. Dr. M'Guire has seen no appreciable benefit from ichthyol in acne and acne rosacea.

Resorcin.—Drs. Ihle and Sherwell commence with a ten per cent. ointment, gradually increasing to fifty or eighty per cent., and consider it a sure cure for eczema marginatum and tinea versicolor. If no irritation is caused, may use a three per cent. ointment daily. In alopecia areata and seborrhœa, ℞ Resorcin, 5.10; olei ricini, 45.; alcohol, 1.50; balsam Peru, .05. Jackson says a number of cases of epithelioma have been benefited by a ten per cent. ointment.

Agnine is a new ointment base, that has not so objectionable an odor as lanolin. *Mollin*—another ointment base—is a soft soap, containing seventeen per cent. excess of fat. It does not become rancid, and makes a good ointment, especially with mercury, and can be rubbed in the skin.

Lanolin consists of cholesterine and fat acids, and is obtained from wool of sheep, hairs of certain animals, horns and hoofs. As obtained in the stores, it is straw color, though it should be white, and has an offensive odor. It is more rapidly absorbed by the skin than any other fat. It is recommended only when we wish to get thorough and quick absorption, as in chronic eczema, syphilis, psoriasis, and parasitic diseases. Dr. M'Guire favors it, with ten per cent. of chrysarobin, in tinea tonsurans, and tinea sycosis. In equal parts it mixes well with mercurial ointment.

Iodide of Potash Eruption is sometimes bullous. Dr. M'Guire reports a case of profuse vesicular rash about the lower abdomen, right groin, extending down to the knee, due to only ten grains of iodide of potash three times a day, for eleven days. Syphilis seldom causes a vesicular rash. It completely disappeared on discontinuing the iodide. These eruptions are due to idiosyncracy—not to the amount or dose; five grains may cause the eruption as well as five hundred.

Treatment of Diphtheria.

Dr. O. Grothan, of Scotia, Neb., gives his views on this

subject in the *Southwestern Medical Gazette*, March, 1887. He thinks *chlorate of potash* has little, if any, power to relieve engorgement, nor is it a specific; but in large doses it poisons the muscular and nervous system as a paralyzer—the very thing not needed. Large doses of *tincture of iron* aggravates the inflammation, and is detrimental to digestion.

Alcohol in proper doses, late in the disease, with threatened death by toxænia, does good; but in the early stage it does harm. When called early to a case of diphtheria, "generalize the disease, and individualize the patient." His present general treatment, under which he has had thirteen successes and no deaths, is calomel, podophyllin and ipecac, in small doses, every two honrs, until free action of the bowels takes place, and then a few moderate doses of quinine. He depends mostly on hourly medium doses of German tincture of aconite, and if this depresses too much, he gives fluid extract of belladonna, but not in combination with the aconite, as the latter is decomposed. Locally, gargle or spray with borate of glycerine, carbolic acid, tincture of iodine and rose water. Externally, he has used turpentine stupes. He uses in all cases early seen, cantharidal plaster, 1x2 inches, over the upper part of the sternum. The diphtheritic membrane leaves the throat and covers the blister, leaving an open sore on the neck which is speedily healed by applications of carbolated cosmoline.

Tubercular Meningtis—Recovery.

Dr. H. E. Pelle, of Louisville, Ky., reports (*Sauthwestern Med. Gaz.*, March, 1887) the case of a boy, aged three and a half years, with tubercular meningitis—diagnosis confirmed by Dr. Larabee—and prognosis very unfavorable. They prescribed Bromidia (Battle & Co.) and bromide of potash, each ʒij; syrup orange, ℥ij; water, ℥j. M. S.: Teaspoonful every hour until quiet. The dose was doubled during the next day, and continued so the following day (July 31st). Four days of stupor followed, even drinking milk without seeming to notice anything. Temperature, 103. Cold coil was kept on head continuously after this. A small cantharidal plaster was applied behind the ears. That peculiar vaso-motor irritability, *tache* cerebrale, was very marked. August 11.—Pulse rapid and weak. Discontinued bromidia, and substituted bromide of potash and ergot every four hours, and gave digitalis, carbonate of ammonia, wine of pepsine and brandy every three hours. August 20.—Nutritive enemata were begun and continued nearly a week,

when improvement began. Bromides discontinued. To the ammonia syrup roborans was added, and cod-liver oil was rubbed on the surface. The child recovered.

Inquiry into the Causes of Great Mortality of Infants in Western Norseland, with Suggestions as to Sanitary and Preventive Measures is the title of a serial well translated article by Dr. Frederick Eklund, of Stockholm, Sweden, full of information and suggestions, being published in current issues of the *Southwestern Medical Gazette.*

Book Notices.

Science and Art of Obstetrics. By THEOPHILUS PARVIN, M. D. LL. D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College; and one of the Obstetricians to the Philadelphia Hospital. Illustrated with 214 Wood Cuts, and a Colored Plate. Philadelphia: Lea Brothers & Co. 1886. Leather, 8vo. Pp. 701. (From Publishers.)

Some good writers are master teachers, and some are not. There is a pleasing, pointed, lucid style of description in our author's talks and writings that give to them a special charm; and his teachings are well remembered. His studious habits, his vast experience and observation, his system of analysis, his excellent judgment, and his easy style of composition have long since ranked him eminent among the long list of authorities. We welcome his book as a luxury, but especially as a profitable addition to the catalogue of text books on obstetrics. It is worthy of adoption by any college, and by any practitioner.

In selecting a chapter for critical reading, we naturally turn to the subject of puerperal fever, as that subject is just now engaging so much of professional study. The three propositions contained in his definition of this disease are that it is contagious, heterogenetic and restricted to the puerpera. That the disease is contagious, no one, we presume, will now deny. But that it is altogether hetero-genetic, there are many who are studying obstinate facts, without bias of opinion—many who, like the "child in the night," simply "crying for the light," are not so satisfied. It is better to confess our ignorance and even to utter for the present the "cry of utter despair," than to adopt a false theory

which gives a false sense of security. There are many cases of puerperal fever recorded in the journals by trusty witnesses, which are more easily accounted for upon the theory of autogenesis—that is, without contact or communication with a previously infected person or thing. In the present state of information on this subject, while accepting the first proposition of our author as unquestionably true, we should enter upon the record, opposite the proposition that puerperal fever is *altogether* or *solely* hetero-genetic, "not fully proven." Hence the judgment upon Fritsch's statements, which attempt to brow-beat opinion into his own mould of thought, is very moderately worded when called "ungracious." An author has a right to define his own use of a term; and admitting this. we offer no criticism upon the third proposition of Dr. Parvin. But turning from these theoretical considerations to the therapeutical sections—to the sections devoted to management of natural labor and the treatment of abnormal or diseased conditions—we find everywhere the advice of a worthy director or adviser.

Nowhere is there the appearance of undue enthusiasm in the advocacy of remedies that, even rationally applied, may fail of the desired effect. But, on the other hand, the lessons derived from a careful study of a big field of experience are earnestly inculcated. Parvin's "*Obstetrics*" is hereafter to be an authority of renown.

Year-Book of Treatment for 1886. Edited by TWENTY-TWO ENGLISH AUTHORS. Philadelphia: Lea Brothers & Co. 1887. Demi-8vo. Pp. 304. (From Publishers.)

It is impossible to give a review of such an annual as this, which is in itself "a critical review for practitioners of medicine and surgery" of the advances recorded in the various journals of the world during 1886. This "review" includes every department of medical and surgical as well as obstetrical *practice.* It attempts nothing in the way of etiology, diagnosis, nor symptoms, but limits itself to the advances suggested or made in *treatment* of diseases, disorders, injuries, etc. The work seems to us to be invaluable to every practitioner, whether he be a general one or a specialist. It is a book to be kept upon the office table for continuous reference. An excellent index to subjects, as well as to authors quoted, is appended. While the writers or "contributors" are altogether English, their frequent quotations from and references to American journals show that American writings are making an impression abroad.

Diseases of the Joints. By HOWARD MARSH, F. R. C. S., Senior Assistant Surgeon to, and Lecturer on Anatomy at, St. Bartholomew's Hospital, etc. With 64 Illustrations, and a Colored Plate. Philadelphia; Lea Brothers & Co. 1886. 12mo. Pp. 461. (From Publishers.

No general practitioner of surgery can well afford to do without just such a work as this. It supplements most excellently the text books on surgery—especially as to the diagnosis and treatment of joint diseases. An omission of great importance, however, is to be noted. In such a work, it seems to us, we had a right to expect a full section on the diagnosis and treatment of Pott's disease, and even on spinal curvatures of other forms. Nothing is said of the diseases involving the spinal articulations. In all other respects, the book is excellent as a guide to diagnosis and treatment of diseases of the joints of the extremeties.

A Practical Treatise on Obstetrics. Vol. I. (4 vols.), Anatomy of the Internal and External Genitals, Physiological Phenomena (Menstruation and Fecundation). By A. CHARPENTIER, M. D., Paris. Illustrated with Lithographic Plates and Wood Engravings. This is also Vol. I. of the "*Cyclopedia of Obstetrics and Gynecology*" (12 vols.), issued monthly during 1887. New York: William Wood & Company. (From Publishers).

We adopt the heading as sent us by the Publishers. The book before us is an octavo volume of 507 pages, nicely issued, and is divided into four Parts. Part I. consists of four chapters of about eighty pages, and is devoted to the special anatomy of the mother, including the mammæ. "Physiological Phenomena" compose part II., consisting of four chapters of about forty pages. Part III. contains eight chapters of nearly 200 pages on Pregnancy. And Part IV., composed of twenty-one chapters on "Labor," takes up the rest of the book. Charpentier's "Treatise on Obstetrics" will be completed in three other volumes, to be issued in rapid succession, and the American Editor (Dr. Egbert H. Grandin, Obstetric Surgeon to the New York Maternity Hospital, etc.), is adding notes and making amendments to the text as he translates it, which thoroughly adapts it to American practice, and brings the work fully up to date.

If we were asked by the reader, what he should do about getting these twelve announced volumes, to be issued monthly—the whole to constitute Wood's *Cyclopædia of Obstetrics and Gynæcology*—we would advise him by all means to subscribe at once. It is a rare opportunity to get within one year, at a marvellously small cost, an invaluable library

on the subjects named. Each one of the books is a standard work. Write at once to the Publishers, asking for a full advertisement circular of these publications for 1887, and remit the charges. To secure these volumes this year will relieve the practitioner of the necessity of buying any other works on obstetrics or gynæcology for some years to come, for they will contain practically all the information on these subjects up to date of issue. Simple dependence upon the better class of medical journals will then be sufficient to enable the owner to "keep up with the times."

Clinical Manual for the Study of Medical Cases. Edited by JAMES FINLAYSON, M. D., Physician and Lecturer on Clinical Medicine, Glasgow Western Infirmary, etc. With 158 Illustrations. Second Edition, Revised and Enlarged. Philadelphia: Lea Brothers & Co. 1886. 8vo. Pp. 683. (From Publishers).

As compared with the edition of 1878, this second edition is so decided a revision and enlargement as to make it practically a new book. The first edition had 546 pages and 85 illustrations, and the printed pages were much smaller. The title on the outside of the book is "Clinical Diagnosis;" but the title as given at the head of this notice more perfectly represents the real character of the work. It is a valuable help to clinical study of cases as they arise in practice, and requires reading with studious care. It is not filled up with tables of differential diagnoses, as some might suppose. The sections are written rather in a descriptive manner. Thus, the chapter on "fits of various kinds" rather describes the characteristics of fits of different kinds in independent sections than taking each symptom and sign of a fit and tracing it out as belonging specially to epilepsy, or apoplexy, or puerperal convulsions, or uræmia, etc. The work is a material *help* to the clinical study of diseases, but is in no sense a substitute for any of the approved systematic treatises on "practice of medicine." The index to subjects seems to be ample and perfect, and greatly increases the value of the book as a useful one for ready reference.

Principles and Practice of Operative Surgery. By STEPHEN SMITH, A. M., M. D., Professor of Clinical Surgery in University of City of New York, etc. New and Thoroughly Revised Edition. Illustrated with 1,005 Woodcuts. Philadelphia: Lea Brothers & Co. 1887. Leather. 8vo. Pp. 877. (From Publishers).

This is, technically, the ninth edition since the first pub-

lication of the work in 1879. The fact that in less than seven years, eight full editions have been exhausted speaks volumes of praise, and tells of a popularity rarely equalled by any scientific book. But the present is really the second edition, and lays claims only to being such because all the previous issues have been but reprints of the original work. But the work as now issued, bearing the imprint 1887, is almost entirely new—so nearly re-written is every chapter, and so numerous are the additions of subjects discussed. The author is an earnest advocate of the antiseptic method in all operations, and well describes the various means by which the antiseptic plan can be most easily carried into effect. We cannot say that the work will take the place of some of the other commonly recognized authoritative text-books on surgery, for Dr. Smith devotes but little attention in many sections to questions of diagnosis, morbid anatomy, etc.; and some subjects generally discussed in surgical works receive no attention whatever—notably, the venereal diseases. The surgeon, however, can ill afford to be without this edition, because in all matters discussed, the author represents safe practical views, and the advanced suggestions of the day.

Text-Book on Surgery—General, Operative and Mechanical. By JOHN A. WYETH, M. D., Professor of Surgery in the New York Polyclinic; Surgeon to Mt. Sinai Hospital, etc. New York: D. Appleton & Co. 1887. Large 8vo. Pp. 775. Leather. Price, $8. (Sold only by Subscription by Publishers).

This is one of the few excellent scientific works we have seen that has no preface; nor is the title page amply full to correctly represent its contents. It is handsomely issued, with large type, having 771 illustrations and several chromolithographs. We do not know of a surgical work for practical purposes that exceeds this one for the general practitioner. Every detail of an operation is well described and graphically illustrated by the accompanying drawing. For some reason the publishers sell the book only by subscription; and while the price seems a little high simply on mention, we guarantee it will not justly be thought to be so after an examination of its pages. Intubation of the larynx is not described; and we might mention omissions of some other recently suggested operations. But as to the numerous operations that are described, one who reads this book and examines the illustrations feels that he has made the best substitute possible for a course of clinical lectures by an able professor.

Determination of the Necesity of Wearing Glasses. By D. B. ST. JOHN ROOSA, M. D., Professor of Diseases of the Eye and Ear, New York Post-Graduate Medical School and Hospital, etc. 1887. Detroit, Mich.: George S. Davis. Paper. 12mo. Pp. 76. Price, 25 cents. (From Publisher).

Dr. Roosa, whose reputation as an ophthalmic surgeon is sufficient endorsement of this little volume, has tried to put refractive errors before the general profession as simply as possible, and show when and why glasses should be worn. But, however clearly the subject is handled, there will be always more or less difficulty in understanding such troubles as astigmatism by those who have forgotten the principles of optics and laws of refraction. In spite of this slight difficulty, study of this short book will go far to explain away many of the prevailing errors about the adaptation and uses of spectacles, and will teach many physicians to determine when glasses should be worn without reference to a specialist. Its thoroughness makes it a desirable acquisition to all medical libraries, and its cheapness enables all medical men to possess it. W.

Granular Lids and Contagious Ophthalmia. By W. F. MITTENDORF, M. D., Ophthalmic Surgeon to New York Eye and Ear Infirmary, Bellevue Out-Door Department, etc. 1886. George S. Davis, Detroit, Mich. Paper; 12mo.; pp. 110. Price 25 cents. (From Publisher.)

This volume of the "Physicians' Leisure Library" should be read by all practising physicians. It goes carefully over the ground of contagious troubles of the eyes, the nature of which ought to be thoroughly understood by the profession at large, because of the great importance of a correct diagnosis in these affections, where an error could lead to such disastrous consequences in propagating the disease. Fortunately for us, the worst form of these troubles, "granular lids" or "trachoma," is an extremely rare affection in this climate, but purulent ophthalmia, especially the form seen in new-born children, is as common here as elsewhere, and a proper knowledge of this subject is all important. Dr. Mittendorf's little book puts it in the power of every one to acquire such knowledge without the expense of purchasing a large and costly volume on ophthalmology.

W.

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Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

A Successor Desired.

A physician, wishing to retire because of ill health, and possessing a competence, will relinquish a very large and lucrative practice to the "right man" purchasing his property at its value This property has been the home and office of well-known surgeons and physicians for nearly fifty years. The present owner having occupied it for more than twenty years, has controlled a large and lucrative practice. This is a rare opportunity to acquire an established business of the best quality, and a home in a beautiful village in Western Maryland. Terms easy to a gentleman with $3,000 capital. Address Surgeon and Physician, care of *Virginia Medical Monthly*, Richmond, Va.

Virginia State Board of Medical Examiners.

As we go to press, we learn the result of the examinations held during the third annual session of the Virginia Medical Examining Board, held in Richmond April 5th, 6th and 7th, 1887. Without intending to anticipate the official report of the proceedings of the Board, (which will appear in our May No.), we will state as an item of news that 19 applicants appeared before the Board, and but 7 passed satisfactory examinations—4 representing the Medical College of Virginia and 3 the Medical Department of the University of Maryland. Twelve applicants failed to attain the standard—75 per cent.—some of whom were graduates of the medical colleges above named.

We will avail ourselves of this opportunity to remark that some of our journalistic exchanges have materially lowered the standard of just and honorable criticism by recently attempting to ridicule, and to cast reflections of incompetence upon, and even to attach base motives to the actions of the Virginia State Medical Examining Board because of the results of some of the examinations heretofore held. We beg of our readers to forgive those exchanges that have condescended to these forms of attack upon a dignified, competent and honorable Board, for they know not what they do; otherwise the charges or insinuations made could, with some ground for belief, be brought against the journals thus descending to attempts at riotous injury.

Years ago, the reputable medical colleges of the country, and the better elements of the profession throughout the United States, became clamorous for higher medical education than then generally existed among the rank and file. Certain colleges, like improved patent mills, were turning out graduates by the wholesale, flooding the country with uneducated and incompetent diploma-holders—regardless of quality and effects. And such was the power of the unequal competition that the reputable colleges were compelled to lower their standards of graduation until some of them, too, unwittingly fell below the mark. Some of the States began to require the registration of diplomas as evidences of qualification to practice; but this was soon seen to be an insufficient safeguard, although for a time it served the purpose of a breakwater. North Carolina first determined upon the personal examination of candidates, as to their proficiency in medical study, as the only protection. Virginia had been struggling to establish the same safeguard since the organization of the Medical Society of Virginia in 1870, but it was not until January, 1885, that the Virginia law, planned by the State Medical Society, went into effect.

The object of this Virginia Board is to test candidates for practice in Virginia only upon their merits as brought out by examinations. No college professor is on the board. The Board stands as a higher court than the college faculties; it has to pass upon the work done by the colleges. Fortunately for Virginia, the Board is composed of men well qualified for the discharge of this duty. The standard of graduation claimed by most of the reputable colleges of the country is 75 per cent. The Virginia Board of Medical Examiners adopts the same standard, and tests applicants solely by this standard. The Board is composed of

men who possess sympathies, and who are as liberal in their markings as they should be. Without partiality to any, they are generous to all—always giving candidates the benefit of doubtfully correct replies, and even stretching their ratings as far as any proper idea of justice will allow. Not the slightest individual preference or partiality can be shown, because the examiners do not know who the candidates are. Each candidate as he enters upon the examination is given a number, but his name is known only to the Secretary of the Board. The candidate returns his examination papers only by the number assigned him, and the respective examining committees examine the papers of No. so and so, and not of Dr. so and so. Catch questions are avoided, or, if asked, are not rated; and not one who has yet presented himself for examination, so far as we have ever heard, has suggested the charge of unfairness. Some who have failed in their examinations have said that some of the questions are too hard. But we publish the questions regularly, year by year, and we have not yet heard of a college professor or a practitioner of education who has said otherwise than that the candidates should be expected to answer them. And yet, in view of all this, we have just had 12 candidates rejected out of a class of 19 applicants, each one of whom is fresh from college with his diploma, and some, we learn, are *honor graduates!*

In view of the facts, will not our reputable colleges learn a lesson and improve upon it? If they adopt a standard of 75 per cent. for graduation, it is but fair for the Examining Board to test graduates by that proclaimed standard. The result of the late examination shows a too large per cent. of failures—twelve-nineteenths—to be accounted for on the supposition that so many happened to be just "good-luck" graduates and "bad-luck" candidates. The figures indicate that the graduates did not come well up to the standard of 75 per cent. when they got their diplomas. The colleges, then, and not the Virginia Board of Medical Examiners, are at fault in accounting for the unhappy result of the recent examination.

These being the facts, and the natural conclusion, we hope our exchanges will lend their help in inducing the colleges to be more thorough in grading their graduates, and not throw the responsibility upon the Virginia Board of Examiners, whose greater pleasure it would be to approve than to disapprove the diplomas of the eminent institutions of learning throughout the country.

We regret that the Virginia Board adopts so early a day in April for its annual sessions. It does not allow time enough for graduates of many colleges to receive their diplomas and present themselves for examination before the Board in session. A number of the best colleges, under the approved system of prolonging their courses of instruction, do not hold their Commencement exercises until the first week in April. The middle of April is certainly early enough for the Board to hold its annual session, and we trust it will change the time for the next annual meeting so as to meet the convenience of a greater number of those graduates who must appear before it.

Announcement of Volume XIV.

Annual Volume XIV begins with this number. The additions to the subscriptions during the past year enable us to promise that it will be a volume of over 1,000 pages—over 100 pages more than annual volume XIII.

Our principal fields of patronage are the Southern and Southwestern portions of the United States. In this territory several very excellent medical journals are published. A goodly number of our subscribers have expressed regret that they could not afford to take more than one or two of these journals, which expressions indicate a more extensive desire to know what is going on in Southern medical literature. In order that we may test the general wish of our subscribers on this point, we have determined on presenting, for awhile at least, synopses of every original article—good, bad or indifferent—appearing in the regular *monthly* journals published in States south and southwest of Virginia, including those of Kentucky and Tennessee. In our department for "Analyses, Selections, etc.," in the April number, we believe we mention every original paper contributed to the March number of each of the monthly journals in this territory. In regard to this "new departure," we would be glad to have free expressions of opinion in order to guide us in the future.

A large number of subscriptions for the current volume fall due on issuing this April No. We hope subscribers will be prompt in remitting the several amounts due by them.

The Biographical Sketch of Dr. Milton Josiah Roberts,

Which we present in this issue, illustrated by an approved engraving, is one that contains many suggestive narrations

that may be utilized by the young practitioner especially. Most of those who start in our profession wishing to attain prominence in it never do it because they lack determination and properly directed energy. Few of them have more to contend with than Dr. Roberts had. And yet look at the result of his activity and will power! The eyes of the entire medical world are now turned upon him because of his late original suggestions and valuable contributions, especially to the department of orthopedic surgery. But as the well arranged and written biographical sketch by Dr. Sullivan, giving so readable a record of Dr. Roberts' wonderful experience speaks for itself, we forbear further reference to the subject of the sketch just now.

Journalistic.

The Nashville Medical News is a semi-monthly, large 30-page journal, begun April 1st, which makes an attractive appearance and comes to our table well edited by Drs. Douglas and McAlister. It is cordially welcomed to our exchange list. Price $2.50 a year.

The Sacramento Medical Times, April No., Vol. I, No. 2, comes to us in exchange wrapper. It is a 42-page monthly, price $2 50, edited by James H. Parkinson, L. R. C. S. I. It is filled with good articles and selections and is listed as an exchange on our books.

Virginia Physicians in Cases of Lunacy, and Their Pay.

Col. Morton Marye, Auditor of Public Accounts for the State of Virginia, has created quite a stir among the Virginia doctors by a circular letter, issued (under date of March 2d, 1887,) to whom it may concern. He says officially:

"I am advised by the Attorney-General that only the family physician is required to be summoned to testify before a commission of lunacy (see section 14, chapter 82, page 717, Code [of Virginia] 1873); and that such physician is not entitled for his attendance to anything more than is paid to other witnesses. There is no law to pay witnesses for attendance before a commission of lunacy, and therefore claims for such attendance will not be paid."

This ruling has been put to the practical test since the issue of this circular letter, and in every such instance to date the usual claim of $5, certified though it be by the proper court, has been refused payment by the Auditor. This suddenly developed ruling is rather hard upon doctors all

over Virginia who have examined lunatics under the law, and hold certified claims against the State of $5 for each such examination.

We do not profess to be able to judge of the correctness of the ruling made; we presume it is according to the law. But if it be law, then we know the law needs changing—the law needs repudiation—and a new law should be enacted allowing the physician compensation for professional services rendered. The law should furthermore allow the calling in of another physician, with or without the family physician, in doubtful cases, according to the good judgment of the "commission of lunacy."

Fortunately the General Assembly of Virginia is to convene in extra session again April 26th. In the meantime, every one of our Virginia readers should see to it at once that his Legislative representative returns to Richmond thoroughly informed and instructed to enact a suitable law on the subject. The fee of $5 is small enough in any case for such professional services, and in many cases is entirely too small.

American Medical Association.

We have just received from the Permanent Secretary, Dr. Wm. B. Atkinson, of 1400 Pine street, Philadelphia, Pa., the announcement of the thirty-eighth annual session, which will be held in Chicago, Ill., June 7, 8, 9 and 10, commencing on Tuesday (7th) at 11 A. M. Delegates receive their appointment from permanently organized State Medical Societies, and such Medical Societies as are recognized by representation in their respective State Societies, etc. Each such Medical Society shall have the privilege of sending one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: "provided, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association." Members of State Societies who are not permanent members, desiring to attend the session, should *at once* notify their respective Secretaries, in order that proper certificates as delegates may be made out for them. A member desiring to read a paper before a Section should forward the paper, or its title and length (not to exceed twenty minutes in reading), to the chairman of the Committee of Arrangements at least one month before the meeting. Dr. Chas. Gilman Smith,

Chicago, Ill., is chairman of this committee this year. A proposition to create a new section, to be known as the Section on Dermatology and Venereal Diseases, will be brought up as an amendment to the by-laws of the Association.

The American System of Gynecology,

Which for some time past has figured among the more important announcements of Messrs. Lea Brothers & Co., of Philadelphia, we are glad to learn is well through the press, and may be expected shortly. Numbering among its contributors such prominent authorities as Professors Barker, Battey, Engelman, Garrigues, Goodell, Reeves Jackson, Lusk, Mundé, Reamy, Thomas, Van de Warker, etc., it will certainly present a thoroughly satisfactory and complete statement of the science in its most recent aspects, and we feel justified in congratulating the profession that what has been peculiarly an American specialty is about to receive from American hands the literary tribute due to it.

Dr, Hunter McGuire

Delivered the address before the Alumni Association of Jefferson Medical College, April 4th, 1887. We will publish this address in full in the May issue. It has been highly complimented by all who have heard it. After the address the physicians and surgeons of Philadelphia tendered Dr. McGuire a reception and banquet at the Bellevue Hotel, which was a magnificent affair. Not only prominent medical men but prominent citizens generally were present in honor of Virginia's eminent surgeon. In reply to a toast, Dr. McGuire said that he knew the honors conferred upon him so often by the Philadelphia profession was simply an earnest of their kind feeling and good will toward the profession of the South. He thanked God that our calling was catholic in the broadest sense of the word, and as a profession it knew no section country or continent.

Graduates Medical College of Virginia, March 31st.

Drs. George W. Archer, Thomas R. Alsop, Henry D. Burwell, Reed C. Carrington, Ramon D. Garcin, Alex. Irvine, James R. Keezel, Robert L. Miller, Frank T. McClintic, John M. Phipps, Samuel A. Reynolds, Wm. Shippen, W. Warren Talley and R. A. Young, of Virginia; and Ernest A. Corey, of Canada. During the Commencement exercises, Hon. A. M. Waddell, of Wilmington, N. C., delivered an eloquently instructive and pleasing address.

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Original Communications.

ART. I.—**Progress and Development of Medical Science.*** By HUNTER McGUIRE, M. D., Richmond, Va.

Mr. President, Ladies and Gentlemen,
Fellow Alumni of the Jefferson Medical College:

Once more we meet in annual re-union for social and intellectual enjoyment, and it is with feelings of no little hesitancy that I appear before an audience of so much intelligence and learning. Unaccustomed to the delivery of addresses before public bodies, and duly appreciating my inability to properly perform the task allotted to me, I bespeak in the commencement of my remarks, your kind indulgence.

In conning over in my mind what might be acceptable to this body, I reached the conclusion, that nothing would prove of more interest than a brief résumé of *The Progress and Development of Medical Science.*

From the first organization of society, down to the present hour, its progress has been one of gradual and constant advancement. Man, before he recognized the necessity of family relations, and before the formation of tribal association, with a range of thought and reflection narrow in the extreme, instinctively felt when laboring under disease the want of medicaments, and turned with his limited powers

*Read before the Alumni Association of the Jefferson Medical College, Philadelphia, April 4th, 1887.

of observation to the vegetable kingdom for the crude materials, which he believed would minister to his wants; these, coupled with incantations and exorcisms, comprised his entire armamentarium. Such remained the case in his further development through tribal relations up to a higher order of government—in fact, until he became nationalized. It is to the Greeks that we must look for the first effort to formulate principles concerning medicine as a science; and in the first dawn of civilization, at a time when recorded events were vague and undetermined, we discover that the religious element had virtual control of this department of learning. To the various temples of Æsculapius, scattered throughout the land, the sick and afflicted were found repairing, seeking the advice and counsel, as well as the religious aid of the Asclepiadæ (the priests of the temples), with whom were deposited the votive tablets of those who had subjected themselves to their treatment. Inscribed upon these tablets were the diseases under which the patients were supposed to have labored, and the remedies resorted to. Judging from the character of the tablets which have been preserved, ideas most obscure and indefinite existed, both as to the history and nature of the diseases that afflicted mankind, while remedies were meagre in the extreme; and we are forced to the conclusion that medicine as then understood did not even bear the semblance of a science. It was not indeed until Hippocrates lifted it out of the slough of ignorance and chaos in which it was enshrouded, that we can claim for it anything like such a dignity. How much we owe to the philosophical mind of this wonderful man is generally not fully appreciated, even at this time. It is difficult to comprehend the apparently insurmountable obstacles that lay in his path—the immense amount of rubbish through which he had to wade, the prejudices he had to overcome, the religious sentiment which surrounded him, and acted as a formidable barrier to the progress of this department of learning. Debarred the right of human dissection, he had to learn anatomy through the agency of the lower animals, and derived his knowledge upon this subject through deductions made from comparative anatomy. It ought not to be a mat-

ter of surprise that he knew so little; it should rather excite our admiration and wonder that he knew so much. He drew his principles from the most careful and patient observations, and, for his time, was an able diagnostician. He practiced cupping, bleeding, cauterization and auscultation. He failed to comprehend the character and extent of the circulation; this was reserved for a happier period, a time when learning and science were placed upon a firmer basis, a time when the Anglo-Saxon had created a country, and carved out for himself his peculiar civilization.

Thus medical science may be said to extend over a period of some twenty-two hundred years—struggling ever onward, ever upward, borrowing wherever a good thought, a prime fact, a philosophical idea, a collateral truth could be had. It should not be a matter of surprise that medicine was so slow in the progress of development; we should rather be wrapped in wondering admiration that it should have overcome the obstacles that lay in its path, and that it should have attained its present degree of relative perfection.

I hope I may be pardoned for calling to your minds the few crude facts which I have set forth in regard to the early rise of medicine, and the life and character of Hippocrates. I may be considered by some in this audience as repeating an "oft told tale;" but we have been taught in the various departments of learning and science that a frequent recurrence to first principles is essential to the proper comprehension of any department of learning. Wedded as you must be to this our beloved profession, guarding its rights and privileges with jealous care, remembering the battles it has had to fight, the prejudices to overcome, the obloquy which has at times been heaped upon it, the struggle for existence it has had to make, the evil association which has been too often forced upon it, all should cause us to hold in profound reverence the names of those who have come to the front in its defence, and have through learning, native ability, and heroic courage contributed their labor in placing it upon a true and proper foundation.

To Praxagoras of Cos, the last of the Asclepiadæ, are we indebted for the first practical observation in regard to the

pulse-rate in disease. Aristotle—philosopher, scholar and teacher, the first of the Peripatetics, the favorite pupil of Plato, the instructor of Alexander, the father of modern psychology, as well as of natural science—was in the latter department the creator of classifications which retained supremacy for centuries. It is to the works of this learned man that we must resort in order to appreciate what was taught concerning human anatomy; his knowledge was culled chiefly through collateral information obtained from a study of the structure of the lower animals; a perusal of his works shows how far he was in advance of his illustrious predecessors.

This much for Grecian learning and Grecian advancement of medicine I have felt constrained to say in order to render intelligible the thread of my discourse. Would that I could dwell longer upon the achievements of this great people. How pleasant to recall to mind the grandeur of ancient Greece! In military conquests, she stood unrivaled; in architecture, she established principles which remain predominant to the present time. Sculpture in her hands reached that stage of perfection, which has never been excelled by any other nation of ancient or modern times. These works of art were but a reflex of the nation's learning and culture. How wonderful that any of them should have withstood the corroding and devastating hand of time! In sculpture, how perfect are her types, how fine her delineations; they convey to the mind the exactitude of the outlines they are intended to portray. What a lesson they teach to those of the present day of the futility of any attempts to improve upon the models they have left behind! How death stands forth in unchallenged rivalry upon the face of the dying Gladiator! Is not the perfection of action portrayed in the Laocoon? With what grace and beauty of outline has Venus de Medici been endowed; and so I might continue, for the field is as rich in thought as the material is almost unlimited.

In the commencement of the second century B. C., Ptolemy, the First, with the aid of Demetrius Phalerius, founded the Alexandrian Library. Books were sought for and pur-

chased from all the known countries of the globe. Jews, Chaldeans, Persians, Ethiopians, Egyptians, Greeks, Romans and others were all made to contribute. The Alexandrian Library was the most complete and comprehensive in the world; it not only rivaled but excelled the public Libraries at Athens; and in consequence the scholars from all countries repaired to Alexandria, in order to take advantage of the opportunities afforded for information in all the known departments of learning. The medical men of the time were no exception to the rule, and here they gathered in numbers, not only because they could receive instruction in all departments of medical science, but they had offered them the great additional advantage of witnessing dissection, and of personally dissecting the human body. They could enjoy the teachings of Horophilies, Erasistratus and others, who taught them of the bones, muscles, internal organs, etc. The former made extensive investigations concerning the location, distribution and functions of the lacteal vessels and the mesenteric glands; the latter was considered most erudite respecting the office, distribution and anatomical composition of the nervous system, and is believed to have been the inventor of the catheter. Ammonius, another member of the school, invented an instrument for crushing stone; and while I have no doubt these instruments would at this time be considered crude, the facts carry out the old aphorism, "there is nothing new under the sun."

Upon the establishment of the Alexandrian school, a contest arose as to the tenability of the doctrines of the Dogmatics, which were the accepted opinions of the learned Greeks deduced from the works of Hippocrates; to these were opposed the followers of Serapion, of Alexandria, and Philinus, who founded the new school of the Empirics. The contest was long and the struggle bitter between these two, but the more rational doctrines of the latter in the end prevailed. The writings of the men who participated in this discussion, have in a great measure perished, and but for the preservative care of Celsus, who gives us a condensed statement of their ideas and opinions, but little would be known of this controversy at the present time.

While her neighbors, Greece and Egypt, were bending their energies to compass medicine, Rome, strange to relate, was destitute of almost all knowledge of medical science. For six hundred years after her foundation, she trusted more to the superstition of the age, than to medicaments for relief in disease. In time of pestilence, the Sibylline books were consulted, and by following their mandates epidemics were supposed to disappear; or again, a temple was erected to Apollo or Æsculapius, and these respective gods were relied upon to suppress disease. Even Cato, the Censor, believed that charms and incantations could break the spell. How puerile all this appears to us in the nineteenth century; we, who have received our impressions in regard to the Romans from her language, literature and learning, which have become the heritage of the educated throughout the civilized world. The mother of the science of government, the parent of civil law, which became the fundamental and organic principle that underlies the laws of the Teuton and Latin speaking races of the present day—Rome, the eternal city, with her magnificent public buildings, her triumphal arches, her gorgeous temples, her obelisks—proud trophies of conquest brought from the domain of her neighbor across the sea—Rome, with her splendid gardens, her extensive libraries, luxurious baths, her amphitheatres of magnificent amplitude, and all the concomitant evidences of wealth, luxury and civilization; how profoundly amazing that she should be steeped in ignorance and wrapped in superstition, so far as human ailments and medicaments were concerned! Were it not for the testimony of Livy and Pliny, these facts, which do hedge her learning and intelligence, would be beyond belief!

It was from Greece that her first physicians came, the most prominent of whom was Asclepiades, the Bithynian, who in the first half of the second century became conspicuous as a writer and philosopher. He was of the Epicurean school of philosophy, and in medicine a Methodistic. He was the first of the writers who drew a distinction between acute and chronic diseases. Themison, his co-laborer in Methodistics, also removed to Rome, and there rose to great prominence in his profession.

To Celsus is awarded the distinction of being the most learned and versatile of Roman medical authors. He lived in Rome during the first century, and by no means restricted himself to medical authorship, but wrote extensive treatises on philosophy, rhetoric and architecture. In his medical works he points out the progress that medicine had made up to his time, and minutely describes the advances in surgery, from the knowledge of anatomy acquired through the Alexandrian school. In surgery he treats of many of the leading operations—of cutting for stone, of reducing and operating for hernia, of cataract, of wounds of the intestines, of trephining in injuries of the head, of the use of the catheter, and how to apply ligatures in divided or injured blood vessels.

Galen, of Pergamus, followed Celsus at Rome; and with the exception of Hippocrates, was the most distinguished of medical writers who had occupied the attention of the world. For more than one thousand years after the enunciation of his principles, he held supreme sway in the schools, and his dicta were virtually absolute. He was a most voluminous writer, and there are still extant eighty-three of his treatises, and fifteen of his commentaries on the works of Hippocrates. His most valuable books are those devoted to Anatomy and Physiology. Dioscorides, of the same period, became greatly distinguished as a scholar and writer; his work on Materia medica remained the standard authority for fourteen hundred years. He ranked second only to Galen, and probably may be considered to have been his equal.

Think of this, O Alumni! Which of the many distinguished and ambitious authors among you expect the principles of medicine you enunciate to last one thousand years, as did those of Galen, or the therapeutics you teach to-day to live fourteen hundred years, as did those of Dioscorides?

And now medicine began to participate in the decline which had already seized upon the other departments of learning. The time of the Dark Ages was close at hand—that blighting pall which was destined to spread over Europe and paralyze its endeavors, both moral and intellectual, for

more than one thousand years. It was the blackness of despair, the destroyer of all hope; and like the persistent power of the mighty ocean, throwing wave after wave against a stranded bark, it seemed as if time and attrition were destined to work out the destruction of all that was desirable—to annihilate all that was good. Few and far between were the works of authors after the commencement of the decline; but most creditably are to be mentioned the writings of Oribasius, of the fourth, Actius, of the fifth, Alexander Trallianus, of the sixth, and Paulus Ægineta, of the seventh centuries. From this time onward the practice of medicine began to fall into the hands of the priesthood, and suffered much thereby. It was the day when the marvelous and miraculous were uppermost in the minds of men; it was a virtual return to the confusion that had existed centuries before; it was a mingling of the supernatural with the practical and material. It was the time of treating disease through the cogent influence of prayer for supernatural intervention, and the minor influence of drugs. The Christian horror of dissection stopped the pursuit of anatomy. Books were few, and the instructions of the past in this department were almost forgotten. No priest could be guilty of the sacrilege of shedding human blood. Surgery was therefore practically abandoned by them, and fell into the hands of the charlatan and ignoramus, to become, later on, an appendage to the barber's art. It was not until the commencement of the fifteenth century that this department of learning was once more restored to its former dignity, and became a part of the education of the medical man. During the decline of letters in Europe, the Arab became the preservator of such facts as had up to that time been ascertained in connection with medicine; and as the fanatical decree of a Mohammedan Caliph (Omer) had doomed the Alexandrian Library to destruction, it was but meet and proper that the same race should make subsequent restitution to the nations of the world for the outrage which one of their great military captains had perpetrated. They contributed little that was original to medical literature, but their writings prove invaluable as compilations from Greek and Roman authors, especially

from the works of Galen, whose peculiar views and finely drawn distinctions were particularly captivating to the bent of their minds. It was in this way that knowledge of medicine was preserved.

Upon the occupation of Spain by the Moors, the Europeans came in contact with their medical writings, and became more or less familiar with what had been taught in the medical schools of Europe and the East. The names of Razes, Ali Abbas, Avicenna, Albucasis, with their Moorish brethren, Avenzoar and Averroës, deserve to be remembered with gratitude by all who followed after them; they preserved, through their voluminous works, the valuable writings of the past, and made their own contributions to medical knowledge.

It is in two directions that the writings of the Arabians are of special interest. From them are derived the first distinct account of eruptive fevers; they divided them into two forms, variola (small-pox) and morbilli, the little pests—the latter embracing measles and scarlet fever. Whether they understood the other known forms of eruptive fevers cannot be satisfactorily determined. In the pursuit of the study of alchemy they discovered many of the principles upon which chemistry was subsequently built, and in their experiments stumbled upon the laws of distillation, giving us distilled liquors. They produced some of the metallic salts, and introduced many of the drugs indigenous to the East, and many valuable pharmaceutical preparations. Besides the science of medicine, the Mohammedan has laid us under obligations in other directions—we are indebted to to him for the science of algebra; he gave us the figures of arithmetic, the manner of using the cipher, and placing the figures, exhibiting in these two sciences alone, a genius alike fertile and practical. If he had done nothing more, he should command the universal gratitude and admiration of the civilized world. While the wise men (the religious men) of Europe were enunciating dogmas concerning the shape of the earth, and denouncing as heretics those who accepted its spheroidity, the learned Caliph Al Mamoun was determining the length of a degree along the shore of the Red sea.

The table of signs, the nature of twilight, and the essential laws for atmospheric refraction in astronomical observations, all come from him. The residence of the Moor in Spain and his government of the country for eight centuries, made an impress upon her literature and learning which was felt throughout Europe. I will not detain you by telling you of the grandeur and magnificence of his architectural designs, of the manner in which he portrays his love for the beautiful and ornamental, of his love for landscape gardening and of his high appreciation of the blending of the grandeur of nature with the mellowing influence of art. Does not what is left of all this in Spain declare the cunning and greatness of the handiwork of the Moor?

From the 9th to the 13th century the Jews turned their attention to medicine; their information was chiefly acquired from those with whom they came in contact in the course of trade. They became distinguished in many instances, and even excelled their medical cotemporaries (the Monks and Priests). The learned and those in the high places frequently patronized them, and the Pontiffs, forgetting the aversion they had for their Hebrew brethren, sometimes sent for them in emergencies.

While learning and letters were at so low an ebb, it was singular that at Salerno a school was kept up during the period of the Dark Ages. It was said to have been founded at the time of the destruction of the Alexandrian library, and to have remained in continuous operation from that time till the revival of letters. At the beginning of the 8th century it became widely known and continued to advance in reputation and importance to the completion of the 13th century, at which time activity sprung up in the universities throughout Europe. John, of Milan, was at one time connected with this school of medicine and gave to the college much reputation as a writer. Another prominent instructor was Constantius Africanus; banished from his country as a sorcerer, he taught for a time at Salerno. So highly appreciated was this school during the reign of Frederick II, of Naples, that he issued an edict forbidding any one to practice in his dominion, without a diploma from Salerno. Stu-

dents offering for graduation were required to pass an examination upon the first book of Avicenna, the Aphorisms of Hippocrates, and the Therapeutics of Galen; then, after taking an oath to be pure in life, submissive to the laws, to attend the poor gratuitously, and not to share the profits of the apothecary, they received their diplomas. Thrown thus upon their own resources, and with the scanty knowledge given them by their august professors, they must have proved themselves formidable barriers to the beneficent course of nature in disease, and doubtless struck many and hard blows which hurried the patients to eternity.

The commencement of the 13th century marks a new era in medicine, for from that time medical science became a part of the education at the universities, a distinct school for instruction in some, as a rule, being established. The works of the older authors were sought after, and translated from the original Greek, whenever it was practicable. A new impulse was given in this direction when, upon the fall of the capital of the Eastern Empire (Constantinople) in 1456, the educated class of Greeks generally sought refuge in the western part of Europe; they brought with them valuable stores of information, and gave to Europe the information they possessed about medicine; the works of Hippocrates, Galen and Dioscorides were speedily translated. This was the first opportunity the universities had for examining the originals; before this time they were compelled to rely upon the Arabic translations. Medical men of that time appeared absorbed in an endeavor to discover what had already been written; and seemed content to prove what were the dicta of the eminent authors who had gone before them, rather than to become investigators themselves, and in this way push forward as innovators and improvers of our science. Conspicuous amongst them were Foes, J. Fernel, Mercuriall and Linacre, the last of whom established professorships at Oxford and Cambridge for the purpose of instruction through the works of Hippocrates and Galen. The dogmas of these authors were regarded very much in the same light as the spiritual edicts of the church; they were to be obeyed, not questioned.

Late in the 15th century the repugnance of the religious world had been sufficiently overcome to permit clandestine dissection; prior to this time, the enthusiast who was in pursuit of knowledge in this direction ran the risk of losing his life, if caught in the undertaking. It is true, Modino, of Bologna, in 1315, made some dissections, but his religion prevented him from opening the cranium; consequently, his publications on this subject contained few additional facts to those which had already been obtained from the works of Galen. In consequence of the scanty information in this department of science, however, the work by Modino became the text-book used in the Italian universities, and so remained for more than three centuries.

As we approach the 16th century we find that dissections were more or less common at Paris, Bologna, Padua and Pavia. The year 1543 was made prominent in medicine by the publication of the first treatise upon Anatomy by Vesalius, Professor of Anatomy in the University of Padua. The age was one of great activity in this direction, as the works of Columbus, the successor of Vesalius, Eustachius and Fallopius attest: they not only confirmed the teaching of Vesalius, but enlarged and increased the information contained in his writings. The art of printing had become practically understood throughout Europe, and in the year 1500, two hundred presses were engaged in turning out books and other printed matter, and the dissemination of knowledge became more rapid and general in all the departments of learning. Like anatomy, surgery commenced to improve; unfortunately for this branch of science, it had virtually fallen into the hands of the barbers, but to this there were occasional exceptions. Gui-de-Chauliac, a learned priest, overcoming any religious scruples he may have had, became a prominent surgeon, and was the first of the men of this period to write a book on the subject—it bears date 1363. In the 16th century the distinguished anatomists above referred to were likewise prominent surgeons. The greatest improvements in surgery, however, were brought about by Ambroise Paré, a barber-surgeon, in the early part of the 17th century. He was

a man of great originality and observation. He proved to the profession that it was not essential to cauterize wounds with boiling oil and other substances as had been in general use, but advised and put in practice the ligation of arteries for hæmorrhage arising from gun-shot and other wounds. This was with Paré an original idea, worked out by a series of experiments, the suggestions of Celsus upon this subject having been buried beneath the forgotten lore of the past.

I will not attempt to portray succinctly the regular advance of medicine further, but will rapidly review some of the important events which took place before the beginning of the 19th century. The school of the alchemist is unworthy of more than a passing notice. Paracelsus was their principal leader. They pulled down much and built up little. In the 15th, 16th and 17th centuries much was evolved both in the discovery of new diseases and the application of new remedies. During the year 1494 came syphilis—or rather that is the first year it was recognized as such, and described. The French called it the Neapolitan disease; the latter returned the compliment by naming it for their adversaries the French. The world at large believed it to be a special visitation of Providence to chastise men for their incontinence, and to force them to obey the laws of monogamy; others, again, believed that it had been brought from across the water by the crews which accompanied Columbus on his first voyage of discovery, and considered it a rebuke to the prying curiosity of European civilization. Although the disease had never been described by any writer previous to this date, it is not reasonable to suppose that it sprung up at this period, but, like many other maladies, it may have been coeval with man, and escaped observation.

The discovery of the circulation of the blood by Harvey in 1628, marks another important event in medicine. He taught this doctrine for ten years before publishing it to the world, and although he encountered long and bitter opposition, he lived to see the day when it became relatively accepted by the world at large. This was followed in 1661 by Malpighi, who, by the aid of the microscope, demonstrated the course pursued by the blood globules in the general cir-

culation, and by Leeuwenhoek, some thirty years thereafter, their course through the capillaries. Malpighi, in 1661, laid the profession under additional obligations by demonstrating the vesicular character of the lungs. In 1662 Gaspard Asseli described the lacteal vessels, and a few years after, Jean Pecquet discovered the receptacle which bears his name, and the thoracic duct from its origin to its termination. In 1639 came Peruvian bark, introduced into Spain by the Countess Cinchon, and known as Jesuits' Bark, it having been obtained by one of that ubiquitous order, who travelled everywhere, bent upon the propagation of their religion, but at the same time sufficiently alert to recognize whatever might prove of use to their fellow-man.

The discovery of Jenner, in 1798, of vaccination, with its attendant results, produced a radical change in the effects of small-pox upon the population of Europe. It would be an act of supererogation upon my part, before this audience, to enter into an account of how he reached his conclusions, and to give the minutiæ involved in his manner of proceeding; nor is it necessary to make more than a passing allusion to the distinguished lady, who, before Jenner had showed to the British profession how the horrors of this disease might be mitigated through inocculation; reviled and scoffed at as being little better than a witch or sorceress, denounced from the pulpit by some of London's most eminent divines, yet, in the end, she received at the hands of her people her vindication, and she stands to-day pre-eminently forward as the most distinguished woman of her day and generation.

I will not attempt to describe the special doctrines and theories of the chemical school founded by Francis du Bois in 1658. His peculiar views were so ably and ingeniously advanced, they captured for the time the profession to a great extent. Both Willis and Thomas Sydenham were mentioned among his adherents. I will not dwell upon the origin of what was known as the mathematical school fathered by Alphonse Borelli. This school sprung up almost simultaneously with that of the chemical, and had many eminent followers throughout Europe. Friend, Mead, and Pitcairn, of England, Boerhaave and Bernoulli, of Germany,

Sauvages and Senac, of France, were all adherents of this school. The inherent principles contained in each were so exclusive and dogmatic in nature as to carry the germs of self destruction within them. They ignored the laws of vitality and the processes directed and governed thereby, and sought to bring all the operations of the human body within the domain of chemical force on the one hand, and the laws of dynamics on the other.

Late in the eighteenth century, Boissier de Sauvages, of Montpellier, rendered an invaluable service to medicine by writing a treatise upon nosology, and this was supplemented, enlarged, and improved upon by Cullen, of Scotland, in 1772. Of course much that was stated has been proved fallacious; for great has been the improvement in the art of diagnosis, and time has brought about experience in studying diseases. Owing to the obscurity in which the subject was involved at the time these great men published their works, they placed medicine under an obligation which will remain as long as time lasts, or our science continues to be regarded as essential to society.

And now we come to the progress of medicine from the commencement of the nineteenth century down to the present time. I will not attempt to trace its history through the writings of the great men who have left their impress behind them, nor will I attempt to even mention the names of many of those who were eminent as inventors, writers, or operators, but will endeavor to account for the progress and development of medicine during the nineteenth century; and it is but proper to state that more has been accomplished in the last eighty-six years in widening and extending its usefulness, and in placing it upon a more scientific basis, than in the preceding five centuries. Further, since 1860—that is, within the past twenty-six years—its progress has been more marked than in the sixty years before.

First, there came a division of labor; writers no longer aspired to be encyclopedic, but were disposed to select either the theory and practice of medicine or surgery, or some one of the subordinate departments of these grand divisions. Then came a rapid and further advance in the collateral de-

partments essential to the development and progress of medicine and surgery, as well as those that were necessary to carry out directly the principles involved in them.

Anatomy, notwithstanding the labor and time which had been previously spent upon it, remained in a most imperfect condition, when Bichat, about the commencement of the present century, through his original mind, systematized the science of anatomy, and added much to it by his study of histology. By the aid of the microscope, comparative and general anatomy had been well advanced. It was not, however, until 1832, by means of the improved compound microscope, that minute anatomy commenced to be studied with that care which was essential to the proper development of that branch of the subject. To Schwann should be given the credit of the discovery of the basis of construction of all the human tissues, by means of their own peculiar cells. Then it was that anatomy reached that stage of perfection which permitted it to be brought to its present standard, and enabled Horner, Gray, and others, to offer to us their valuable works. From the time of the acceptance of Schwann's views, proper investigation in regard to morbid or pathological anatomy may be said to have commenced, and hence arose the useful and comprehensive works of Virchow and others. Where these investigations are to end, who at the present time can foretell? The horizon of our discernment is too restricted to make a prediction upon so important a matter. The time may come, and at a day not far distant, when the laws which we consider as established in regard to pathological anatomy may be overturned, and all our preconceived views fall with them.

In physiology, the proper comprehension of which is indispensable before the laws of disease can be fully appreciated, this epoch has been fruitful in results. Banishing from the field of investigation, because incomprehensible, the animating principle of life, and accepting the declaration of Bichat—"Life is the sum total of the functions which resist death"—we have been able more clearly to comprehend and investigate the laws of health, and the perfect co-operation of the component parts, tissues, organs and secretions pecu-

liar to man—the vital principle, of course, being always held as the predominant essential of human existence, governing and guiding all that relates to life.

Chemistry and minute anatomy have come largely to the assistance of the physiologist in unravelling much that has heretofore been considered as not only incomprehensible, but beyond the ken of man. We are especially under obligations to the investigators of the present century, for broadening the views, that had been previously entertained, concerning the action of the various organs involved in digestion and secretion—depriving many of the organs above referred to, of any peculiar innate principle save that of elaborating their own special secretions, and finding in these secretions certain inherent principles that are chemical in their nature, and act upon food, under the proper degree of elevation in laboratory, in a kindred manner to that displayed under the directing vital force. They in this manner discovered that many of the functions of the body were performed under purely chemical and physical laws.

It is in the investigation of the functions of the nervous system that this period has proved fertile and ingenious. All the laws governing the cerebro-spinal and sympathetic nervous systems, have been studied and explained, so far as these laws, with our present knowledge, can be comprehended. The determination of the various functions of the brain, the governing action of the medulla oblongata and the spinal cord, the localization of special ganglia which preside over the functions of the various parts of the body: the manner in which the sympathetic governs the vascular circulation, and the mutual co-operation of the two systems throughout the body, have all been most forcibly described. Especially important has been the discovery by Brown-Sequard and his co-laborers, of localized points in the brain, their offices, and the manner in which they act under injury or disease; in this way surgery has been greatly aided, and relief given in conditions which heretofore have been considered as inevitably fatal. Especially is this the case in certain conditions of bone depression, in penetrating wounds,

in effusions, in the formation of abscesses, and, above all, in determining the location through bodily manifestations, of brain tumors, thus enabling the surgeon, who is a practical physiologist, to determine and eradicate the mischievous cause.

Chemistry, the offspring of alchemy, the bequest of the Egyptian, through the Arab to the European, has proved no laggard in the contest for advancement and improvement through the centuries in which she has been recognized as a science. Her advancement and discoveries, embracing the period from the last and the commencement of the present century, have been most marked. During this time how rich the field, how industrious her votaries; how astonishing the truths which they have rescued from the obscurity in which they lay hidden! At this time Lavoisier gave us the laws of the combination of bodies. Priestley discovered oxygen, Guyton de Morveau in 1782 created a nomenclature, which, with slight modifications of Lavoisier, Berthollet and Fourcroy, and accepted by him, continued as the predominating system to within the past few years. Berthollet produced his great work on affinities; Bergman and Lavoisier gave the laws governing quantitative analysis; many of the methods of Klaproth in the same branch, in their accuracy and usefulness, have not been improved upon to the present time. Fauquelier discussed the laws of analysis governing mineral bodies. Menzel and Ritcher determined the law of the combination of bodies through chemical equivalents. It was reserved for Dalton to offer to the scientist the first tangible mathematical conception in regard to the combination of bodies by means of atoms. Swiftly upon his heels came Guy Lusac with his views in regard to volumetric combinations. Berzelius and Hesringer in 1803 demonstrated the power of galvanism in decomposing bodies. Sir Humphrey Davy, the greatest of his day in the science of chemistry, added much to electro-chemistry. Chevreul discovered and treated of the fat acids and their combinations. Liebig and Pasteur, names always to be remembered, how great their achievments, how varied and extensive their contributions to the science of chemistry! Ever thus is science

moving onward; The stirring activity of the hour promises much, and what it will in the end attain, the future alone can determine.

Time will not permit me, in order to keep within the scope of this address, to give more than a passing notice of Materia Medica and Pharmacy. I know that my audience is familiar with the improvements that are daily taking place in these branches; in the former, rich contributions are continually made through the practical workings of clinical observation; in the latter, drugs and medicines are being reduced from their crude state, their virtues extracted and condensed, and every variety of means resorted to in order to render them more permanent, more active in character, and more agreeable to the palate.

How can we properly discriminate when we come to the department of the Practice of Medicine. The contributors to the literature of this subject are most numerous, and rich is the field of medical literature in this branch throughout Germany, Italy, France, England and America. The writers during the different periods of this century bear witness to the ceaseless changes that are constantly taking place in the practice of medicine. The views expressed by one set of authors are scarcely announced, ere the resistless demand for improvement and advance calls for the remodeling of lines of thought to meet the requirements of the hour—not that the age is capriciously swayed by the desire "for change for the sake of change," but clinical experience, pathological observation, the better and more minute study of disease are continually evolving something new, which of necessity requires the re-casting of opinion. The most important of all the discoveries made within the past eighty years was the ability to discriminate in many of the diseases of the body, by means of auscultation and percussion. To Laennec in 1819 is due the credit of systematizing what had been previously found out in this direction, and, while it is true, as heretofore stated, that Hippocrates is said to have practised auscultation, and that Hooke and Auenbrug in the seventeenth century had suggested the possible advantage in diagnosis, of certain sounds emitted from the body in disease,

these suggestions lay dormant until Corvisart, Double, Bayle, and Laennec commenced their investigations; the latter was much indebted to the labor of his contemporaries for the principles underlying the system. He rescued what was essential from the vagueness and uncertainty with which it was surrounded, and arranged in a concise manner what was known upon the subject. Appreciating the necessity for an instrument to intensify sound, he invented the stethoscope. It would be superfluous for me to dwell upon this subject. We have fallen upon times so happy, that he would be considered a tyro indeed who did not at least affect a full knowledge of auscultation and percussion. The sphygmograph was another invention by no means insignificant, enabling the physician to recognize nice distinctions in regard to the tensile force, and the vibratory motion in arterial circulation. As to the hypodermic syringe and the thermometer, their universal use attests their value; those of us who were educated to rely upon the sense of touch to determine the temperature of the body in fevers, learned at an early period after the adoption of the thermometer, how frequently we had been led astray, and how often our conclusions were erroneous. To this period belongs the introduction of the endoscope, and the opening up to external vision of the interior of canals and cavities.

The tendency of the present time, as before mentioned, is to the division of medicine into special departments, and the result is a higher order of attainment in it as a whole. The practice of medicine is no exception to the rule, and while there appears a disposition upon the part of the profession to decry the advantages that are claimed to be brought about by this division of labor, the sentiment arises rather from a want of proper consideration of the subject, than from any inherent defect that lies within the policy itself. It is true that to become a competent specialist, one must be familiar with the fundamental principles of medicine, and these remarks are intended to embrace the latter class and these alone. How valuable were the contributions in 1836 to 1840 of Richard Bright in regard to certain morbid conditions of the kidney; what a rich field for investigation it

offered, and what a flood of light he threw upon conditions that were previously considered as constitutional and general. It opened a therapeutical avenue, which up to that time had been entirely unknown. Of what benefit were alike the investigations in the department of the diseases of the nervous system, in the diseases peculiar to women; and so I might continue, did time permit, in depicting the advantages that arose from this manner of special investigation.

The achievements in Surgery have been greater during the nineteenth century than in all the other centuries combined. Permit me cursorily to review some of the more important advances that have been made. It gave us the amputations at the hip and shoulder joints, the resection and removal of portions of the upper and lower jaws, as well as the entire removal of each; the resection of bones at the joints with the preservation of the periosteum, and the development thereby of new bone, the ligature of the arteries within the trunk, and at their points of departure from the body, the various operations for cleft and deficient palate, partial amputations at the foot after the manner of Pirigoff, Malgaigne, Syme, Chopart and Lisfranc; the operations for opening the upper air passages in cases of asphyxia, the process for repairing disunited fractures, the successful treatment of calculus by lithotrity, the treatment of hair-lip and club-foot. It improved the methods of remodeling the nose, lip, and other facial deformities by transplantation of tissue; it likewise improved the treatment of ulcers, abscesses and sinuses; it extended our knowledge of tumors, brought them under proper classification, pointed out their predominating characteristics and the required treatment. The manner of treating internal aneurisms by ligature and by electricity; treatment, by improved methods, of varicose veins, the extirpation and intubation of the larynx, the removal of the thyroid gland, treatment of gun-shot and penetrating wounds of the chest and abdomen; removal of fluids from cavities and abscesses by means of the aspirator; removal of the kidney, spleen, the uterus, and the various tumors found in the abdominal cavities. It taught us how to remove the pus collected in ab-

scess of the liver, how to relieve the gall bladder of foreign contents, how to resect portions of the stomach and the bowel, how to extirpate the inferior portion of the rectum. It gave us Sims' speculum, thereby producing a revolution in the practice and surgery of gynæcology; it gave us his metallic suture, and taught us better methods of applying all sutures. It has given many appliances for the treatment of fractures and dislocations, all looking to fixation and immobility during the process of repair. It has impressed upon us the necessity of cleanliness in the treatment of injuries and surgical operations; likewise the necessity for the use of antiseptics and germicides. In the oral, laryngeal and ophthalmic departments, the improvements are innumerable. In 1851 was produced the ophthalmoscope, and in 1857 the laryngoscope so essential to the surgery of the eye and throat. It has rendered the division of surgery into different departments indispensable for the better improvement of its methods, and thus compassed its rapid progress as a science. Better and of far greater importance than all, it gave us anæsthetics, for the greatest strides have been made since their introduction. Operations prior to that time which had been considered impracticable, were found to be within the bounds of surgical undertaking. The days for the performance of rapidly executed manœuvres were numbered, and the element of time no longer played an important role in meeting indispensable conditions. Conservatism became the order of the day, whenever it was legitimate to exercise its requirements. How many limbs have been saved, how many deformities overcome, how many patients rescued from death. By the aid of anæsthetics, brain surgery has been rendered more easy; the trephine has been brought into more general use, tumors of the brain have been removed, pus cavities opened, serum let out and bone elevations rendered less difficult; the abdominal cavity has been opened, the kidneys, spleen and uterus have been extirpated, the stomach and bowels resected, and great achievements in ovariotomy and abdominal tumors accomplished; in all the departments of surgery where minuteness of observation, skill and care in operating were required, they have been found in-

dispensable. We have fallen upon happy times; we, who practice this art, have passed beyond the day of radical requirements. The predominating idea is no longer how we can get rid of an offending member; it is rather what can be done to preserve and render it useful to its possessor. What results have been brought about in this line by means of resection! Many a limb which, previously, would have been condemned, has been preserved and made to perform its functions. The laws of limitation have been extended to that point where vital force, and the power of recuperation, will bring within their compass the power of preservation.

While mentioning improvements and inventions made during this century, I cannot omit a reference to mechanical inventions of special character. Who can remember, without feelings of delight and pleasure, the great results obtained in overcoming disease and deformity of the spine, by means of the plaster jacket, the product of the fertile brain of one of America's greatest specialists (Sayre), and from the same source the ingenious appliances for overcoming diseases of joints and limb deformities? It is with especial pride we call to mind the practical conception of Bigelow, for crushing stone and washing out the bladder; and the still greater achievement of him who stood pre-eminent, the immortal Sims, the pioneer of gynæcological and abdominal surgery! The fundamental truths established by him will be remembered, their practical utility recognized, and their principles applied so long as surgery continues to be practiced as a science.

The fatality attendant upon certain of the capital operations in surgery, especially in those where the abdominal cavity was opened, awakened the greatest interest and the most extensive speculations as to the cause and origin of the diseases, which followed in the path of the operating surgeon. This was especially the case in regard to septicæmia, pyæmia, erysipelas, and other allied diseases. Simultaneously sprang up investigations as to the origin of disease in general. The special cause that gave genesis to disease was abandoned to the field of the unknown, when the scientific world was suddenly awakened from its apathy by the inves-

tigations of Pasteur, Koch, Cohn, Tyndall, and others, and the publication of their peculiar views, as to the primary causes of the various maladies which afflict the human family. Do not understand me for a moment as asserting that ideas akin to those above expressed had not occurred to minds equally active; but owing to the want of proper instruments for minute investigations, they fell short of the discoveries made by our cotemporaries.

The latter were enabled, through the improved microscopical means at their command, to descry and outline the minute organisms which lay plainly defined beneath the lenses, the family of schizomycetes or bacteria, the little mites that were destined to revolutionize the medical world concerning its conceptions as to the causes of disease. How firmly established they are for the present we all well know. What is to be the period of their endurance who would have the hardihood to declare? Perhaps they are to remain with us permanently; perhaps their tenure of supremacy lies in the immediate beyond. Be this as it may, we have them now with us, and what revolutions they are working in regard to our previous conceptions of the laws of disease, whether for good or for evil, time alone can tell. Let us hope the general agitation, which is always attendant upon the introduction of ideas and opinions at variance with those we have entertained, may be the means of producing results which will be of permanent benefit to medicine at large.

In surgery, the adherents of this school teach us to beware of the incursions of these terrific minutes, these *bêtes noirs*—real Goths and Vandals, they declare them to be; and, in order to render them harmless, certain drugs as germ destoyers, certain appliances of a mechanical nature, and certain details are described, which are to be religiously carried out. All has not been smooth and fair sailing with these enthusiasts; opposition to their views has been boldly declared, and veritable iconoclasts have arisen to dethrone this idol of the hour. Who can witness, without the keenest interest, the discussions that are constantly taking place upon this subject? Sir Joseph Lister has his following; Mr. Keith has his, while Mr. Tait and his adherents are by no means driven from the field.

The agitation of this question has brought about valuable reforms, and none so much so as the concession made by all —that cleanliness and minute attention to detail are indispensable in all leading surgical operations.

With a due degree of hesitancy upon my part, and disclaiming any intention to dogmatize, this mnch I desire to declare as a matter of opinion: That in all operations where the abdominal cavity is opened, it is essential that all blood should be removed before closing the incision; for I firmly believe that the decomposition of blood (the putrefactive decomposition) is the prime cause—I had nearly said the sole cause—of producing those affections which are recognized as so destructive of life.

How pleasant it would be to examine this subject in detail! But a proper regard for my audience reminds me that their powers of endurance may be overtaxed. How auspicious are the times upon which we have fallen! How marked the progress of the world in all the departments of learning! —in none more so than in that of our beloved science. Throughout the civilized world, active, industrious, painstaking investigators are hourly at work, endeavoring to evolve something valuable to be contributed to the general stock of knowledge. We are truly in an age of rapid advance and active improvement. The means of intercommunication between nations has so improved of late, there is no thought, valuable in its nature, when coined into expression, but at once becomes the common property of the world. This continued interchange of thought, this organization of scientific brotherhood, where lie the limits of its capabilities? where will its usefulness and ultimate attainments end? An all-wise Providence has placed lines of limitation to the mental conception of man; it is reasonable to infer that the restless activity of the human brain will never cease until this goal is reached. I trust I will not be considered irreverent if I give voice to the expression, would that we could be spared to witness the zenith of knowledge which the department of medicine is in the end to reach! Though this cannot be, we have the consoling reflection that the time in which we live has untold advantages, and we have not been slow to embrace

them. In addition to this, who can gaze without admiring enthusiasm upon the philanthropic tendencies of our age? What efforts are being made by the medical profession to improve mankind; how the laws of health have been studied, and the knowledge acquired, given without pecuniary recompense, to the world! We look with admiring wonder upon the charities and benefits conferred by those in civil life to humanity at large. This is a period in which hospitals are founded, dispensaries established, homes for the maimed, aged and infirm erected, colleges endowed; indeed in every way does wealth endeavor to foster, encourage and extend the usefulness of medicine.

Who can recall to mind without feelings of the deepest emotion of pride and admiration, the liberal donation of New York's munificent son, recently made for the promotion of medical education? Is it unreasonable to suppose that there are others who will follow his praiseworthy example? I trust that in the near future some one of the many philanthropic men, which this city happily possesses, may be found to be equally willing to promote the cause of medical science, by richly endowing this our own beloved Alma Mater.

Our Alma Mater! Pardon me if I add a word more in this connection. I remember, when a lad, with what intense interest I listened to my father, when he told me of the men who organized this school, and with whom he was personally acquainted; of Geo. McClellan, to whose genius and labor the existence of this institution is probably due; of Granville Sharp Patterson, Eberle, Smith, Green and others of that day, and this college. That indelible impression which the mind of youth alone can receive, and most of all from a father's tongue, was strong upon me, when, more than thirty years ago, I matriculated here. I did not feel a stranger to these halls, when it was my privilege to listen to Dunglison, the erudite man and fluent speaker; Huston, clear-headed and honest; Joseph Pancoast, the accomplished anatomist and born surgeon; Mitchell, the polished gentleman and scholar; Charles D. Meigs, brilliant, great and good; Franklin Bache, the learned chemist and upright man; and Mütter, eloquent, skilful and beloved. And a few years after,

when I again attended lectures here, Mütter was dead, and in his stead, we had S. D. Gross, then and for many years after, the foremost living surgeon in the world.

Great these men seemed to me then, and their characters grow no less with the lapse of time. Through the mists of many years by which they are enshrouded, I see them now, the veritable giants which they were. When I look around me to-night and see the present distinguished corps of professors, I know that some future Alumnus, filling the place I occupy now, in fitter and more eloquent words, will tell another audience the names of the present Faculty, and that they will go down into history as great and grand as those of whom I have just spoken.

These gentlemen are working hard and earnestly to secure that which is so greatly needed—that for which we have longed and prayed—an elevation of the standard of medical education. It is not, I am sure, asking too much of you, Brother Alumni, to co-operate with them in this labor. Let us solemnly resolve to-night, here in these historic halls, in the presence of the illustrious living, and surrounded, I believe, by the spirits of the illustrious dead, to work in conjunction with this Faculty, and never leave off striving, until the Jefferson Medical College has placed herself before the American public, as the chiefest of all others in elevating and perfecting medical science.

ART. II.—**A Skeptical View of Some of the Reputed Causes of Puerperal Septicæmia.** By W. R. CUSHING, M. D., Big Spring Depot, Va.

I have been very much interested in reading the papers on "Puerperal Septicæmia," and the discussion arising therefrom, reported in the *Transactions of the Medical Society of Virginia* at its last session. My experience, although comparatively limited, has been very like that of Dr. Apperson, as regards the condition of things frequently found by the country practitioner when he reaches his patient. The different opinions expressed as to the theories of auto-genesis

and hetero-genesis leave it still undecided. The general trend of teaching, however, is that it is caused by septic infection from without, by means of *germs* transmitted either directly from other cases, or arising from infectious or contagious diseases, such as scarlet fever, diphtheria, erysipelas, etc., whatever may be true in regard to the other doctrine.

How the statement in regard to contagious diseases can be possible, and yet be in accordance with the nature of *specific germs*, is beyond my comprehension. The descriptive word, *specific*, in its definition, would prevent us from accepting, in the abstract, the idea that such germs or microbes can generate an affection different from that in which they originate. There can be no doubt that *septic* germs will produce septicæmia, and there *must be*, according to the germ theory of disease, a *specific* germ for its production that, in its nature, can cause no other. To arrive at any other conclusion amounts simply to assuming a thing as true and then hunting about for arguments to prove the position. The theory is stated as a *fact;* but when called upon for proof, the writer or speaker argues as a reconciler, a trimmer, for and against, and when he concludes leaves us in the same state of uncertainty in which he found us. Take one statement made and follow it to a legitimate conclusion. A recognized writer says, "Most authorities hold that true diphtheria of the vagina is not seen, only in some cases a diphtheroid mass may be found upon the vaginal walls, in puerperal septicæmia." If this view be correct, we find that the so-called *specific* germ of diphtheria, which we have believed can cause nothing else, becomes wholly changed when transferred to the vagina of a puerperal woman, loses its *specific* character, and its whole nature is reversed; so that it not only *does not* but *cannot* produce its own kind. Where will such theorizing lead us? If the germs causing the various diseases can be so changed in their nature and effects, they are not *specific*, and the whole superstructure that the bacteriologists have been so industriously building threatens to fall about them. I will not discuss this any farther; but admitting, *for the sake of argument*, the usually accepted belief, a question of importance arises that I do not remember having seen referred to.

It has been emphatically stated that no practitioner should attend labor cases while he is engaged in treating any of the above-named diseases. One well determined point, learned not only from our own experience, but also from that of generations of physicians who have preceded us, is, that in the *majority* of contagious diseases, one attack protects the the patient from a recurrence of it; or, in other words, the specific germs have no effect whatever, after having once exhausted themselves once upon the system. Of course, some exceptions occur, but they by no means disprove the rule. Take scarlet fever, as an example, acknowledged to be of this class. Is a woman in labor, who has had scarlet fever in childhood, liable to develop puerperal fever from being attended by a physician who is at that time treating cases of the former disease? If she is not, it ought not to be overlooked; on the other hand, indeed, every writer on the subject ought to note the fact, so that the profession may fully understand it.

To state the proposition more clearly, ought the scarlet fever germs have *any* effect in the case of a woman who would not be susceptible to them under ordinary circumstances? Reasoning from analogy, I would think not. An attack of smallpox protects from a recurrence of the disease, as a rule, without regard to the manner of subsequent exposure. In other words, the virus of smallpox, whatever it may be, is considered as harmless as distilled water, to one who has experienced the disease, not even being an irritant. He may be inoculated with it, and the scarifications will heal like a simple cut without the virus. We are fast approaching the same belief in regard to some other diseases.

The position I take is, that a person who has had scarlet fever, or other diseases that renders the system free from a second attack, will experience no effect in the event of a subsequent inoculation with the same virus. Pasteur's theory of the prevention of hydrophobia—the old system of smallpox inoculation, and later on vaccination, Ferran's cholera inoculations, and the yellow fever inoculations practiced in Brazil—are all based upon this idea. It is true that some of these things are still regarded as of doubtful efficacy, but the general principle is accepted.

What have we in the case supposed? A woman who has had scarlet fever, and is accordingly not susceptible to it, is inoculated with *its germs*, carried by the finger of the physician. What is the result? Under ordinary circumstances it would be harmless, and I fail to see why we should perceive any effect in such a case. Given a patient with such a history, I would be strongly inclined to attribute puerperal septicæmia to a coincidence, and not to her contact with scarlet fever germs.

The legitimate effect of this conclusion would be to modify professional opinion and teaching on this subject. The accepted view embraces too much. If we admit that a woman can contract the disease through the medium of another affection, we surely can go no further than to say, no physician, while treating scarlet fever, and like contagious diseases, should attend a woman in labor *who is not protected by having experienced the disease previously.*

I am anxious to draw out some opinions as to this question. If my reasoning is faulty, or if puerperal septicæmia will not be hemmed in by the laws of analogy, I would like to know it.

Art. III.—Treatment of Puerperal and Surgical Septicæmia, with Incidental Reference to the Causes of the Disease.*

By R. B. STOVER, M. D., Richmond, Va.

An intelligent treatment of septicæmia, like that of other diseases, must be based upon an intelligent opinion as to what septicæmia is. My own view in regard to this subject is that there are two distinct and separate causes that produce two distinct and separate diseases, known as septicæmia. The one is a chemical poison, or ptomain, originating perhaps from putrefactive changes, and does not reproduce itself. The other is a micro-organism, and is capable of self-reproduction after having entered the system.

Now it would be pertinent to inquire if puerperal and surgical septicæmia were a production of one or the other of

*Read before the Richmond Medical and Surgical Society, April 12th, 1887.

these causes, or if the one produces puerperal, and the other surgical septicæmia, or if either may produce the one or the other variety.

It will be seen at a glance that the differential diagnosis is surrounded with many difficulties, and that the treatment depends largely upon its correctness. For instance, in surgical septicæmia, especially where it follows abdominal wounds, it is the accumulation of bloody serum in the peritoneal cavity, which is absorbed and carried into the circulation, that gives rise to the symptoms that follow. Whether this bloody serum has undergone a putrefactive change or some other is a question not for us to determine. In puerperal septicæmia, it is the entering into the circulation from without the body, through the open wounds of the genital tract of some foreign and extraneous matter—that is, germs or micro-organisms—that lights up the flame that burns so fiercely. In other words, in the first instance, it is from the host's own household from whence comes the poison; and in the other it is the guest's who introduces it.

The prophylactic treatment in both would consist in thorough drainage to prevent absorption of septic matter; and in the puerperal variety in shutting down the gates through which germs or micro-organisms enter from without. The last suggestion would hold good in open surgical wounds as well as in puerperal cases. This may be accomplished by first flushing out the wound or the torn genital tract, as the case may be, with disinfecting washes, such as one to three or eight thousand solution of mercuric bichloride, or solution of carbolic acid, or permanganate of potash, or borasic acid, or sulpho-carbolate of soda, or Blair's thymol, or Listerine—any one of which, in my opinion, will prove satisfactory. I do not say that this would be judicious practice in every case of labor, but if from any cause such as erysipelas, diphtheria or scarlet fever in the same house, or a contaminated atmosphere surrounding it, we fear infection, then such practice is not only justifiable, but if not followed, the attending physician would be held culpable for his neglect. After this is done, antiseptic dressings should be applied to the vulva, or stump, or open wounds, to prevent entrance

of poisonous vapor or matter from the surroundings; and perhaps the best material for this purpose is antiseptic cheese-cloth or gauze, which can be had at any of our drug stores. It has the merit of being light and cheap, and if properly applied is perfectly satisfactory.

If these ideas are literally carried out, we will accomplish all that is possible so far as prophylaxis is concerned. They hold good in the treatment of both surgical and puerperal septicæmia. In a few words, it means strictly surgical cleanliness, and it is the only rational management of such cases.

I would not have it understood from what I have said, that I would advise that every case of labor should be treated in this way; for if we have no reason to fear septic influences, I would regard such practice as meddlesome interference. In an ordinary case of labor, free from such surroundings as I have mentioned, we cannot, in my opinion, improve by anything we may do on what nature does. My own belief is, that notwithstanding the genital tract may be torn and wounded by the passage of the fœtus or the use of instruments, we cannot supply by any artificial means a more soothing and healing fluid to lubricate such surfaces, than that provided by nature, unless, indeed, as I said before, it has become poisoned by the entrance of some toxic principle from without; nor do I believe that ordinary inflammatory processes which may follow such wounds are necessarily dependent on, or have anything in common with septic influences. I mean that if inflammatory processes follow such genital wounds when septic influences are at work in the same patient, they are co-incident and not dependent upon such, and that we may have inflammatory action without sepsis, or sepsis without inflammatory action. Hence I will not stop to discuss the treatment of such accidents, but will pause to say that in many such instances the patient is said to have puerperal septicæmia.

The next question that presents itself for our consideration in the way of treatment is, what is the best way to manage such cases after the disease has actually begun? If I could indicate with any assurance of certainty a plan other than that now known and practiced by obstetricians

and surgeons, that would lead to better results, I would feel that truly I was a benefactor to the human race, and particularly to the better part of it—woman. But unfortunately I know of nothing that we may do with which you are not already familiar; and I fear that I will prove tiresome by going over the same ground that has been so ably and eloquently discussed by the greatest minds in our profession.

If I were called on to select from among the different remedies known to us the one most valuable in the treatment of surgical or puerperal septicæmia, I would say opium. It is in my opinion the sheet anchor; all others are secondary and only adjuvants. It is not perhaps that it is curative in the true sense of the word, but that it allays all nervous perturbation and at once puts at rest that great central organ, the brain, with its endless ramifications, and thus conserves the vital forces of that complex machine, the human system, so that the poison may be eliminated through the different emunctories, which are the great outlets or sewers through which, by a wise provision of nature, all useless, effete and poisonous materials are carried away. There is absolutely no limit to the dose; each case must be a law unto itself. We should be guided solely by the effect aimed at, which should be but little removed from the border land of complete narcotism. It makes no difference what preparation is given, whether the crude gum or some one of its alkaloids; nor through what channel it enters the system—whether the hypodermic needle, the mouth or the anus. I do not mean by what I have said on opium in connection with the treatment of septicæmia that we must absolutely narcotize our patients, but I wish to convey and emphasize the idea that we must give them rest, let the dose be what it may, great or small.

The next remedy most worthy of confidence is alcohol. It prevents with far more certainty, than any other remedy known to me, metamorphosis of tissue. It sustains the weakened and enfeebled heart's action. It gives tone to the digestive processes of the disabled stomach and intestinal canal, and thus gives time to the flaging vital forces to

eliminate and expel from life's citadel the enemy that has entered and taken possession. Alcohol, like opium, must be given without regard to quantity. When the temperature is reduced, the heart sustained, and digestion improved, the right dose is reached, and should be so continued, increased or diminished as the necessities of the case require.

The next remedy to which I would call attention, and in which I have much confidence, is quinine. I would not give it as an antiseptic, and as a sustaining remedy. It equalizes the circulation and gives tone to the flaging powers and neutralizes malarial influences, if such be present; and I believe there are but few people, though seemingly ever so healthy, who have not malaria in their system. Most assuredly I have seen the different types of malarial fever developed in puerperal women who, before their confinement, showed no symptoms of it. I usually give from three to five grains of quinine every three or four hours, and combine it with the dose of opium.

In conclusion, so far as other medicines are concerned, I know of none, unless some special indication is to be met, that I would rely on in the slightest degree. Antipyretics, such as antipyrin, quinine, salicylic acid and cold, as well as the arterial sedatives, veratrum viride, aconite and gelseminum, are depressants, and if administered would increase the sedation already existing, and thereby diminish the patient's chances of recovery. The same reflections would hold good in regard to purgatives, alteratives, diaphoretics and diuretics. Of course the secretions must be looked after if flaging, but not stimulated to such an extent that it would amount to depletion. Food is of paramount importance, and must be liberally allowed in the most concentrated and easily digestible shape. If this is overlooked or neglected, it would be like sending the wing of an army to the rear in time of battle when the whole line was sorely pressed by the enemy.

109 *N. Seventh Street.*

Original Translations.

From the French. By R. M. SLAUGHTER, M. D,, Theological Seminary, Va.

Self-Poisoning (Auto-Intoxication) in Disease.

Dr. J. Comby (in *Le Progrés Médical*, 26th February, 1887) states that Prof. Bouchard says, in his admirable book, *Auto-Intoxications dans les Maladies*, following his former one, *Maladies par Ralentissement de la Nutrition*, recalls to the medical public the part which he has taken in the scientific movement of the last quarter of a century. After having in his first work removed from the diatheses the mystic veil which disguised them and made them physiologically intelligible, M. Bouchard reveals pathogenic processes not less important nor less obscure. The healthy as well as the diseased man is a receptacle and a laboratory of poisons. These poisons are derived from alimentation, disassimilation, the secretions, and from the elaboration carried on by the microbes which normally inhabit the digestive tubes. Why is not the man who is incessantly manufacturing poisons poisoned? Because he is protected by his liver and emunctories. The liver arrests on their way the toxic substances taken up from the intestine by the portal vein, before they have entered the general circulation, and neutralizes them or throws them again into the intestine. The kidney plays in this role of protection a still larger part. It eliminates a quantity of poisons which, when prevented from escaping by this emunctory, causes a fatal result. Prof. Bouchard has pointed out the presence in the urine of seven toxic substances: one diuretic substance, one narcotic, one sialogogue, one which contracts the pupil, one *hypothermisante*, and two convulsion-producing substances. According to his researches, a kilogramme of living blood contains in its plasma enough poison to kill more than 1,250 grammes of living matter; so then a man dies poisoned if his blood comes to contain ten times more poison than it should in the normal state. Among the secretions, the bile is toxic, particularly through its coloring matter. The digestive tube which contains the potash of the aliments, the bile, the products of intestinal putrefactions, is an abundant source of poisons. M. Bouchard has pointed out that the toxicity of fæcal matters was due to potash, ammonia, and to alkaloids. By intestinal antisepsis, the alkaloids of the fæcal matter and

urine may be made to disappear and the toxicity of these two excretions diminished. Uræmia, the most important of all the intoxications, is due to several poisons which contribute to the general toxicity in the following proportions: coloring matters, three-tenths; extractive matters, one to two-tenths; potash and mineral matters, four to five-tenths. A knowledge of this multiplicity of toxic agents enables us to understand, as may predominate such or such of them, the many forms which uræmia may assume (convulsive or comatose), and the appearance of certain special symptoms (hypothermy, pupilary contractions). It is to be seen how the practical points spring directly from these experimental researches. The value of intestinal antisepsis is everywhere shown, and the *clinic* of uræmia is the beneficiary of these researches.

Next, as to the poisoning which results from the retention of normal poisons, M. Bouchard has studied the morbid conditions which arise from increased formation of these poisons—gastric derangement, constipation, intestinal obstruction. Dilatation of the stomach is a disease in which there is an excessive formation of poisons. It causes, besides well known digestive and nervous troubles, an albuminuria which our author has been the first to study. In causing abnormal gastric fermentations and in making excessive the intestinal fermentations in forming poisons, especially acetic acid, dilatation of the stomach alters the nutrition of the osseous tissues and produces osteomalacia, a new variety of rheumatism, and perhaps rachitis. In the *infectious diseases*, and particularly in typhoid fever, auto-intoxication is not to be neglected, even from the therapeutic point of view. This intoxication may be combatted by intestinal and general antisepsis, and by the warm baths gradually cooled, which have given such brilliant successes for M. Bouchard. In *icterus*, auto-intoxication plays a part. The bile is toxic by reason of its coloring matter, which is eliminated by the urine or fixed in the tissues. It is poisonous too, though indirectly so, by reason of the biliary salts which, in breaking up muscular tissue cells and blood globules, set free organic and mineral poisons. The true safeguard of the system against poisoning in icterus is the kidney. The proof of this lies in the great toxity of icteric urine. In certain diseases which cause icterus, the liver is altered or hindered in its functions and ceases to form urea, *the diuretic par excellence;* it no longer opposes a sufficient barrier to the poisons which come to it by the portal vein from the intestine; from this may re-

sult cholemia, acholia and uræmia. Again, in the case of an icteric patient, if the action of kidneys or liver is insufficient, there will set in an auto-infection from retention of normal poisons. In *acute yellow atrophy of the liver* there is the same formation of abnormal poisons. In *acetonemia* there is also auto-infection from abnormal poison. *Cholera* is an example of multiple intoxication. There is at first a poison, formed either by microbes or through their influence, when follows by means of the anuria a secondary poisoning from retention of normal poisons. The myosis described by M. Bouchard is the clinical criterion of this uræmic intoxication of cholera.

To really appreciate the knowledge of the part played by auto-intoxication in disease, it was necessary to establish upon a scientific and experimental basis the fact that the organism in health formed and eliminated poisons. The irrefragable proof of this fact is furnished by the toxicity of normal urine, which M. Bouchard has studied to a wonderful extent. Those poisons which he has found in the urine he has discovered the source of in blood, tissues, secretions (bile), and in the fæcal matters.

Tuberculosis of the Œsophagus.

(Vienna letter in *Le Progrès Médical*, 5th February, 1887.) Dr. Zemann, assistant to Prof. Kundrat (of the chair of pathological anatomy), in a recent important communication to the Imperio-Royal Medical Society of Vienna, says:

Tuberculosis of the œsophagus, which is generally considered as not existing at all, or very rarely, presents itself under the following forms:

1. By the propagation of the same morbid process from the lungs, themselves diseased, or from the bronchial lymphatic glands, and tuberculous trachea. It is more particularly the lymphatic glands at the bifurcation of the trachea, which, as is known, are most often tuberculous. The disease then spreads towards the œsophagus, and at some point may cause a perforation when the tuberculous process extends beyond the limits of the lymphatic glands. Of such cases, some may recover. On the other hand, the disease may spread upon the anterior wall of the œsophagus as tubercles are developed in the vicinity, above and below. and in such cases the tubercles ulcerate more slowly. The loss of tissue caused by this process may attain large proportions, as it causes ulcerations of two to three centimeters long. Very often in advanced cases a perforation of the trachea or one of the bronchi occurs. These cases are not so rare as was

formerly believed. In 106 cases of phthisis examined by Dr. Zemann, he has found three with such lesions. Louis found this localization of tuberculosis six times in 129 cases.

2. Another form occurs when the tuberculous process spreads from the pharynx or larynx. This is a development of tubercles in the continuity of the alimentary canal, and in these cases the ulcerations are most often superficial, but may be confluent and attain the largest size. These are found in the upper third of œsophagus. In the 106 cases mentioned, this form occurred in two. Another case only of the kind, that of Beck, is known in medical literature.

The most interesting form is that which occurs as a consequence of the above-mentioned ulcerations. This most often follows corrosions produced by corrosive substances. Dr. Zeman cites four cases of this kind, of which one had already been described by Dr. Breus. The preparations shown by Dr. Zeman to the Society explained why the œsophagus enjoyed so great an immunity against the bacilli which doubtless pass through it often and in large numbers. But from the moment when the œsophagus is deprived of its stratified epithelium, which, as every one knows, is capable of great resistance, it becomes accessible to the immigration of bacilli. These cases of tuberculosis of the œsophagus (second form) were those of persons who had swallowed with suicidal intent hydrated potash or nitric acid, and had incurred strictures of the œsophagus. They were persons who were tuberculous prior to the taking of the poisons. In other cases the œsophageal tuberculosis was established in the course of very bad attacks of phthisis. The disease had a duration from three to fourteen months. Autopsy showed, besides tuberculous lesions of the lungs, a tuberculosis of the bowels, but never tuberculosis of bronchial or tracheal lymphatic glands. In the cicatrized tissue of œsophagus were found yellow caseous tubercles. Microscopic examination of these caseous masses showed giant cells and bacilli. These cases show why in cases of phthisis the œsophagus is so rarely affected—why tuberculosis does not spread by vicinity.

3. When the stratified epithelium of the œsophagus is broken or entirely wanting, infection from the bacilli, which reach it through the sputa of the person, may become possible; and then there is tuberculosis of the œsophagus of great extent. Very few such cases have been mentioned in medical literature.

4. Mazotti has also cited a case of acute miliary tubercu-

losis of the œsophagus, but this would seem to occur very rarely.

In conclusion, tuberculosis of the œsophagus occurs under four forms: 1. As a propagation of the tuberculous affection from the lymphatic glands or lungs; 2. As a spreading of the tuberculous process in the continuity of mucous membrane, starting from the pharynx or larynx; 3. As an acute miliary tuberculosis; 4. As a direct infection of the diseased mucous membrane by swallowing sputa containing bacilli.

Liquid Vaseline a Vehicle for Irritant Substances.

(*Le Progrès Médical*, 12th February, 1887.) At the meeting of the Société de Thérapeutique, on the 26th of January, 1887, Dr. Dujardin-Beaumetz remarked upon the difficulties which had existed in injecting under the skin irritant substances, such as iodoform, iodol, etc. These difficulties are removed by M. Mennier, who, by the use of liquid vaseline, injects even sulphide of carbon. This vaseline, known under the name of oil of Bakouck, dissolves with ease nearly all the antiseptics, and is itself harmless. M. Mennier has tried in this way eucalyptol in the treatment of pulmonary phthisis, using the formula:

℞. Eucalyptol pure..... 20 grammes.
Vaseline .....100 grammes.

Dr. Dujardin-Beaumetz has been able to assure himself that the medicine is absorbed. He has injected himself iodoform and eucalyptol, both combined and separately. Trials with other substances have not given as satisfactory results.

Dr. C. Paul remarked that the oil of vaseline was precious because it takes the place of those liquids used to dissolve antiseptics and which corrode syringes.

M. Duchenne stated that the substance in question was properly an oil of vaseline.

Proceedings of Societies, Boards, etc.

MEDICAL EXAMINING BOARD OF VIRGINIA.

RICHMOND, VA., April 5th, 8 P. M., 1887.

The Medical Examining Board of Virginia assembled on the call of the President, in Murphy's Hotel, corner Eighth and Broad streets, said call having been made ten days prior to the time of meeting; and it appearing that a quorum was present, in the absence of both President and Vice-Presi-

dent, Dr. Hugh M. Taylor, of Richmond, Chairman of the Executive Committee, was, on motion, called to chair.

The roll was called, and the following gentlemen answered to their names: Drs. T. J. Moore, of Richmond; I. S. Stone, of Lincoln; O. B. Finney, of Onancock; W. W. Douglas, of Warsaw; Herbert M. Nash, of Norfolk; R. A. Lewis, of Richmond; Hugh M. Taylor, of Richmond; Hugh Stockdell, of Petersburg; Hugh T. Nelson, of Charlottesville; Wm. P. McGuire, of Winchester; C. C. Conway, of Rapidan; H. M. Patterson, of Staunton; and Z. J. Walker, of Brownsburg—of the *Regular* Members; and Drs. M. E. Douglas, of Danville, and G. A. Taber, of Richmond, of the Homœopathic Members.

A telegram was received from Dr. H. Gray Latham, President of the Board, stating that he was detained at home by the sickness of a member of his own family, whose death was hourly expected. This was read to the Board, and the Secretary instructed to communicate with the President, and inform him that the Board regretted his absence, and desired to express its sympathy for him in his affliction.

The reading of the minutes was called, but, on motion of Dr. Nelson, it was resolved that, inasmuch as printed copies of the minutes of the last meeting had been sent to each member of the Board, the reading of the same be dispensed with; it was also resolved that the *Resolutions* on page 6 of the printed report—lines 26–33 inclusive—should not be considered as belonging to the minutes of last session, but should lie over until next meeting, with the view either to their adoption or rejection.

The reports of the Chairmen of Sections was then called for, and made in the following order, the Examination Questions as given below being those adopted by the Board:

Plan of Examination.

[Under the by-laws approved at the last meeting of the Board, "the applicant is required to answer at least *three-fourths* of the questions satisfactorily, and he is to be rejected if he fails to answer satisfactorily *thirty-three and one-third* per cent. of the questions on any one section or sub-division of the whole examination. He is also required to sign his papers with a number furnished him by the Secretary, who shall record the number after the applicant's name on his registered list to be kept for the purpose, and only the President and Secretary shall be allowed to examine the aggregate sheet during the examination."

The time allotted to make answers to questions in each section, three hours.]

SEC. I.—CHEMISTRY.—Dr. R. A Lewis, chairman.

Ques. 1. Give sources and modes of preparations of iodine; its combinations with other elements; their chemical, therapeutical and economic uses. Mode of testing for iodine when in combination with alkalies.

Ques. 2. Give combination of NC_2 with O and H.* Describe these compounds and give their properties and uses.

Ques. 3. Test water for chlorine, iodine, bromine, iron, lime, soda, potash, lithia and sulphuric acid.

Ques. 4. Give chemical composition of protein, albumen, caseine and gluten.

Ques. 5. Give chemical composition of alcohol, sulphuric ether, chloroform—their sources and modes of preparation.

Ques. 6. Define a base; name metals of alkalies and alkaline earths; give their sources and modes of reduction.

SEC. II.—ANATOMY.—Dr. Hugh M. Taylor, chairman.

Ques. 1. Give number of vertebræ and how divided; give anatomical differences between the vertebræ.

Ques. 2. Name and describe the ligaments of the knee-joint.

Ques. 3. Describe the construction of the nasal cavities.

Ques. 4. Describe the duodenum; its relations; its vascular and nerve supply. Also state where a serous and mucous tissue are contiguous.

Ques. 5. Give general and descriptive anatomy of the kidney. Name source whence fundus and neck of bladder derive nerve supply.

Ques. 6. Locate and name the lobes, fissures and convolutions of the cerebrum.

Ques. 7. Portal system; composed of how many veins? Name and locate them.

Ques. 8. Give general and descriptive anatomy of the eye.

SEC. III.—HYGIENE AND MEDICAL JURISPRUDENCE.—Dr. Herbert M. Nash, chairman *pro tem.*

Ques. 1. What is meant by personal, domestic and public hygiene?

Ques. 2. What should be the hygiene of the school-room in regard to light, air, temperature, numbers, length of study hours, recreation?

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*There being some difference of opinion as to the correctness of this symbol, the question was afterwards substituted: "Give the symbols of the *Alum* series."

Ques. 3. What are the chief disinfectants and how used?

Ques. 4. What should be the hygiene of foods in regard to kind, quality and cooking; and in regard to drinks—beer, alcoholic drinks and wines.

Ques. 5. What is meant by medical jurisprudence in regard to lunacy, infantacide and murder?

Ques. 6. How do you distinguish between a child born alive or born dead? And if killed, furnish the reason for so believing.

SEC. IV.—PHYSIOLOGY.—Dr. H. M. Nash, chairman, *pro tem.*

Ques. 1. Describe the physical characters of the blood, the functions of its corpuscles and its chemical composition.

Ques. 2. Describe the structure and functions of the capillaries.

Ques. 3. Name the varieties of muscular tissue, their distribution and the effects of muscular exercise on the lungs, circulation, skin, voluntary muscles, digestion and temperature.

Ques. 4. Name the origin and distinguishing qualities of the digestive ferments, pepsin and trypsin.

Ques. 5. Name the great divisions of the nervous system, with their chief characteristics and functions.

Ques. 6. Name the sources of the innervation of the heart and arteries.

Ques. 7. State the physiology of the pneumogastric.

Ques. 8. Describe the fœtal circulation.

SEC. V.—MATERIA MEDICA AND THERAPEUTICS.—Dr. C. C. Conway, chairman *pro tem.*

Ques. 1. To what kind of fevers is aconite adapted, and why?

Ques. 2. Name chief emetics in use and doses.

Ques. 3. Name sources and doses of the three most efficient anthelmintics.

Ques. 4. Describe ipecacuanha, its properties and uses.

Ques. 5. Give history, source and medicinal properties of cinchona bark.

Ques. 6. Give dose and properties of hydrargyrum subsulphats.

Ques. 7. Give the phenomena of acute opium narcosis.

Ques. 8. What are alteratives? Give example of the most efficient.

Ques. 9. Name the preparations of mercury most used, their doses and therapeutical uses.

Ques. 10. Give the origin, uses, and different preparations of belladonna.

Ques. 11. State the uses of ergot.

Ques. 12. Give the sources and medicinal properties of salicylic acid.

SEC. VI.—OBSTETRICS AND GYNÆCOLOGY.—Dr. Z. J. Walker, chairman *pro tem.*

Ques. 1. State causes of ante-partum and post-partum hæmorrhage, with the period of gestation at which ante-partum hæmorrhage is most likely to occur. State the management of each.

Ques. 2. Under what circumstances would you resort to instrumental delivery, and what is the mode of procedure in each condition?

Ques. 3. Under what circumstances should ergot be used in labor? State some of the dangers incurred by its injudicious administration.

Ques. 4. Give diagnosis and treatment of puerperal convulsions.

Ques. 5. When would you resort to podalic version, and how would you proceed?

Ques. 6. Give physical signs of inverted uterus, and how would you differentiate from polypus and fibroid tumor?

Ques. 7. Enumerate causes and treatment of leucorrhœa.

Ques. 8. Enumerate causes and treatment of dysmenorrhœa.

Ques. 9. Give symptoms, causes and treatment of pelvic cellulitis.

Ques. 10. Give diagnosis and treatment of concealed uterine hæmorrhage.

Ques. 11. What disposition would you make of a prolapsed cord during labor?

Ques. 12. Give cause and treatment of puerperal septicæmia.

SEC. VII.—PRACTICE OF MEDICINE.—Dr. H. M. Patterson, chairman *pro tem.*

1. Causes of	1. Neuralgia. 2. Cerebral thrombosis and embolism.	3. Rheumatoid arthritis. 4. Anæmia.
2. Pathology of	1. Croupous pneumonia. 2. Aphasia.	3. Bulbar paralysis.* 4. Hay asthma.
3. Symptoms of	1. Acute spinal meningitis. 2. Scarlatina.	3. Acute uræmia. 4. Dengue.
4. Diagnosis of	1. Tricuspid, mitral and aortic regurgitation. 2. Remittent fever.	3. Croupous pneumonia. 4. Variola.
5. Treatment of	1. Scarlatina. 2. Typhoid fever.	3. Biliary calculi. 4. Hysteria.

*This term was explained to refer to Wachsmuth's "progressive bulbar paralysis," or the disease more commonly known as "labio-glosso-laryngeal paralysis."

SEC. VIII.—SURGERY.—Dr. Thomas J. Moore, chairman.

1. Causes of	1. Aneurism. 2. Intestinal obstruction, acute and chronic.	3. Osteitis. 4. Cystitis.
2. Pathology of	1. Pyæmia. 2. Potts' disease.	3. Glaucoma. 4. Atheroma.
3. Symptoms of	1. Compression and concussion. 2. Scirrhus of mammary gland.	3. Fracture of neck of femur (intra-capsular). 4. Secondary syphilis.
4. Diagnosis of	1. Intestinal strangulation. 2. Femoral hernia.	3. Differential diagnosis between sub-pericranial suppuration and erysipelas. 4. Fracture of anatomical neck of humerus.
5. Treatment of	1. Ligation of popliteal artery. 2. Larrey's amputation of shoulder.	3. Amputation of foot (Pirigoft). 4. Fracture of radius above the insertion of pronator radii teres.

Dr. Patterson offered a resolution altering the Section on Practice to hold its examination *First*, which being lost, he gave notice that he would move "*a change of order of examinations at next meeting of Board.*"

Dr. W. W. Douglas, in referring to Dr. Black's resignation, which was known to be in the hands of the President of the Board—the said resignation having been offered in view of Dr. Black's contemplated change of residence to a point outside his present Congressional District, for the purpose of taking charge of the Southwestern Lunatic Asylum, of which he had been recently elected Superintendent—urged the Chair to fill the vacancy on the Legislative Committee thus occasioned, by some member of the Board residing near Richmond for, obvious reasons.

Dr. Lewis moved that the sense of the Board be taken as to whether applicants for permits to obtain license to practice medicine or surgery could be rejected on grounds of immorality, previous violation of the *Medical Act*, or other deficiencies than those pertaining directly to their professional attainments.

After a good deal of discussion, in which it was brought out that this privilege was vested in some other State Boards—notably in the *Board of Examiners of Medical Society of the State of California*, which also had the power of revoking licenses for immoral and unprofessional causes—it was ordered that the Legislative Committee ascertain the opinion of the Attorney-General on the point at issue.

Drs. W. W. Douglas and Moore, of the Legislative Committee, at once called upon the Attorney-General, and during the session reported that the Medical Act required the Board to examine *every person* who applied to it, irrespective of any and all conditions—this being the advice of the Attorney-General after carefully considering the law.

Dr. I. S. Stone asked whose duty it was to hunt up evidence against those practicing illegally.

It was moved and seconded that the Legislative Committee be requested to take steps to find out whose duty it should be; and this Committee was also instructed to ascertain whether persons suspected of practising illegally could not, upon evidence, be brought within *magisterial jurisdiction* during the recesses of the Grand Juries of the counties wherein such illegality was practised. Carried.

On motion of Dr. I. S. Stone, it was ordered that the spring sessions of the Medical Examining Board of Virginia be hereafter held regularly—until further notice—in the city of Richmond, during the first week in the month of April, and that the Medical Institutions of the country be requested to take note of the same.

The reports of officers were next call for.

It was a matter of regret to the Board that the President was not on hand to make his report.

The Secretary—Dr. Nelson—read his report, of which the following is a full synopsis:

He had made written reply to seventy-one communications upon matters relating to the Board.

Had circulated upwards of two hundred copies of the *Proceedings of the Fall Session of* 1886; copies of the same had been sent to forty-seven medical institutes in America.

Several copies of *Report of Illinois State Board of Health* had been circulated among members of this Board.

In several instances parties had written, giving what purported to be information in regard to alleged illegal practitioners, but in all instances save one evidence had been produced showing that the charge was unjust. In regard to this one, no reply had been elicited.

Dr. Barton, of Rappahannock, is still practicing illegally, and his prosecution will be pushed at the next Grand Jury term of the Rappahannock County Court.

He had notified each member of the Board of the time and place of the present session; twenty-one of thirty-six had replied as requested—fifteen giving information that they could not possibly attend. Notice had also been in-

serted in the *Richmond Dispatch* for ten days prior to the meeting.

This report was accepted and ordered to be spread upon the minutes. In regard to the last clause of this report, the Executive Committee was instructed to consider the advisability of advertising the sessions of the Board in other ways than through one newspaper, it having appeared that very few of those specially interested had gotten the desired information through the channel heretofore employed, and it being very desirous that applicants should come before the Board in session, and not apply so largely to the individual Examiners.

The Treasurer then made his report, which, after having been subjected to the scrutiny of an Auditing Committee, and attested by it as "*correct and supported by proper vouchers in each instance,*" was ordered to be spread upon the minutes.

CASH ACCOUNT MEDICAL EXAMINING BOARD OF VIRGINIA.

To amount on hand last report		$ 56 45
To receipts since to date		65 00
Total		$121 45
By Disbursements:		
Express paid	$ 1 75	
Black-board and chalk	2 65	
Advertising	6 37	
Expenses of hall, gas, etc	6 50	
Printing	4 75	
Telegrams	79	
Expense in matter of Booton	14 90	
Stamps, wrappers, etc	5 00	
Secretary's expense to Richmond	3 25	
Printing reports	20 00	
Check book	1 09	
Bill of former President	75	
Commission on gross receipts $65 00	6 50	
Balance subject to check	47 15	
		$121 45

Under the head of New Business, it was urged by Dr. I. S. Stone that the importance of examination in *Microscopy* demanded the formation of a separate section therefor. Discussion ensued, and it was agreed that this subject could be amply covered by Examiners in the several sections already formed.

There being no further business before the Board, an adjournment of the business session was agreed to, and a resolution was passed that the Examination be begun promptly at 9 A. M. on Wednesday, April 9th—the next morning.

RESULT OF EXAMINATIONS REPORTED—APRIL 8, 1887.

Name.	College of Graduation.	Postoffice.
Dr. J. Janney Best,	Univer. Md.,	Brucetown, Fred. Co.
" R. C. Carrington,	Med. Col. Va.,	Richmond, Va.
" R. D. Garcin,	" " "	" "
" Jos. M. Phipps,	" " "	Saddle, Grayson Co.
" Wm. F. Slout,	Univer. Md.,	New Hope, Aug. Co.
" W. W. Talley,	Med. Col. Va.,	Lynchburg, Va.
" G. B. Young,	Univer. Md.,	Orange C. H., Va.

LICENSED SINCE LAST SESSION PRIOR TO PRESENT.

Name.	College of Graduation.	Postoffice.
Dr. B. F. Cobb,	Jeffn. Med. Col. of Phila.,	Richmond.
" H. W. Harrison,	Med. Col. of Va. and P. & S. of N. Y.,	Univ. of Va.
" R. A. Martin, Jr.,	Bellevue Med. Col., N. Y.,	Petersburg.
" F. C. Tice,	Jeffn. Med. Col. of Phila.,	Roanoke,

In the conduct of this examination, it may be stated that the By-Laws were rigidly adhered to, and each applicant handed in the written answers to the questions propounded, signed with a *number* given him by the Secretary, so that, in valuing the said answers, no member of any section was cognizant of whose paper he was reading, and the general result was arrived at in the same manner.

Of the nineteen applicants who appeared before the Board, and during this session, seven were *licensed.* Of the twelve rejected applicants six were graduates of Medical College of Virginia, four were graduates of University of Maryland, two were graduates of Howard University, Washington City. Both of these last were *second-time* rejections.

[Official.] HUGH T. NELSON, M. D.,
Sec'y and Treas. Med. Exam. Board of Va.

MEDICAL SOCIETY OF NORTH CAROLINA.

FIRST DAY—*Morning.*—The Thirty-fourth Annual Meeting was held at Charlotte, N. C., April 13, 1887, and was called to order by the Chairman of the Committee of Arrangements, Dr. George W. Graham. After prayer by Rev.

Mr. J. Y. Fair, of the Presbyterian Church, Mr. F. Howard McDowell delivered the *Address of Welcome*, which was appropriately acknowledged by Dr. Charles J. O'Hagan, of Greenville.

The President, Dr. H. T. Bahnson, of Salem, assumed the duties of his office, and then read the

Annual Message of the President.

He congratulated the Society upon the arrival of its 38th anniversary and the 34th annual meeting. Its yearly meetings had never been interrupted except by the four years of war. The membership has, from its beginning of a dozen, steadily increased, until it now numbers five hundred. Its influence for good has been felt in every community. It has maintained the good will and confidence of its friends, and silenced the calumnies of its enemies. Its Board of Health has ameliorated the sufferings of the poor and the prisoner, and its license law has protected the citizens from quackery and imposition. He reminded the members that each one should come to the Society with the result of the thought and labor which he had devoted to the cause of medicine in general, to be re-told for the benefit of the members in session. He believed that the increasing interest shown by the larger and more attentive meetings promised for the Society a still greater measure of usefulness than it had yet attained. He commended the good work of the Board of Medical Examiners to the approval of the Society and the citizens at large. Their arduous duties had been performed conscientiously and with strict regard for the high place which they held. The needs of the Board of Health were alluded to, and the efforts of the Society invoked to aid this organization to reach its highest state of usefulness. He called attention to the need for better hygienic arrangements in all the jails and poor-houses throughout the State. Although in many places the good effects of the work of the sanitarians composing the general and county boards of health were showing themselves in the arrangement of public institutions, there is still great room for improvement. Speaking in terms of sympathy for the sufferings of the Charleston physicians, from the effects of the earthquake in August last, he recounted his efforts to collect subscriptions for their aid. This collection amounted to $215.35, which amount was sent to Dr. F. Peyre Porcher, of Charleston. He thought that the membership of the Society should embrace all physicians in the State. He commended the suggestion of Dr. Graham, made in Newberne in 1886,

looking to the formation of county societies as auxiliaries to the State organization; but this did not cover the entire wants of the Society. Many physicians who were not amenable to the examination by the Board of Examiners before entering the Society would become members of the general body if allowed to join by being vouched for by two members in good standing, one of whom must be present at the meeting, sign the Constitution for him by proxy, and pay the admision fee. This plan would throw all necessary safeguards around admission, and secure the support of a largely increased membership. He thought the members derelict in duty in not imparting to the other members when assembled the knowledge they gain in their practice. The humblest country physician meets with experiences and is confronted by emergencies hardly hinted at in the text-books. It was a country physician who led the van in the triumphal march of abdominal surgery. His long and lonely rides give time to the country physician for careful thought; and we all bear willing testimony to the instructive papers that these members of our Society have contributed to the pages of its *Transactions*. The simplest every-day occurrence may convey a lesson that a long resumé of opinions of the text-books will fail to impart. He recommended that an increased number of the *Transactions* of the Society should be printed, and that its distribution be more general outside of the State, that the work of its members might be better known. This, in connection with the present circulation of the *North Carolina Medical Journal*, would largely enhance the value of the contributions to the Society, by giving them a larger number of readers. He recommended that the *North Carolina Medical Journal*, under its present management, be adopted as the organ of the Society, believing that such connection would benefit it, as well as aid its senior editor, who had been untimely stricken down, and is now confined npon a bed of sickness. He alluded in tender friendship to the sufferings of Dr. Wood, and spoke of his faithful and self-sacrificing labors in behalf of this body. Looking to the earlier publication of the *Transactions*, he believed that it should be the rule of the Society that all articles that are not received within ten days after the close of the session should not appear in the *Transactions*. More days should be devoted to the sessions of the Society, and a programme of work before each day should be accurately madé out, so that all of the short time allowed for the meetings might be utilized. This programme should be sent to

each member with the annual notice of the meeting. We might follow the example set us by the Dental Association, in devoting one day of our session to clinical lectures. These demonstrations, and the profits derived from them, would be greatly enhanced in value if we could secure at our meetings one or more of the great clinical teachers of the country. He desired to emphasize the importance of securing and maintaining our fraternal relations with the Medical Societies of the adjoining, and even of the distant States of the Union. He believed it would result in great good to the members attending these meetings; and the appointment as a delegate to another Medical Society should be regarded both as an honor and an obligation, if accepted, to attend the meeting of the Society to which he was appointed. He suggested that the names of the members should appear in the *Transactions* in the order in which they joined, and not in alphabetical order, as they now do.

On motion of Dr. Young, thanks were tendered the President, and his Message was ordered to be printed unabridged. And on motion of Dr. R. H. Lewis, a committee was appointed to report on the suggestions in the Message.

Dr. R. H. Lewis introduced Dr. Joseph A. White, of Richmond, Va., Delegate from the Medical Society of Virginia. Dr. White thanked the Society. He not only came as a representative from Virginia, bnt also as Chairman of a Committee to carry out one of the suggestions in the President's Message—to draw nearer together the profession of our Southern States. He was the Chairman of a Committee appointed to organize an Inter-State Association between the States of Virginia and the Carolinas. He hoped that the project would meet with the approbation of the members of the Society, and that they would take some action towards carrying out this project by the appointment of a committee for that purpose.

Afternoon.—Meeting was called to order at 3½ o'clock.

Dr. Long moved that a committee of five be appointed to consider Dr. White's suggestion of the morning session, as to the establishment of an Inter-State Medical Society. Carried.

Drs. W. C. Dabney, of University of Virginia, J. S. D. Cullen, of Richmond, J. J. Chisolm, and J. McL. Tiffany, of Baltimore, were introduced to the Society.

On call for reports of Sections, Dr. E. M. Littlejohn read

A Report on Obstetrics and Gynæcology.

He devoted the first part of his address to the study of the use of *antiseptics in obstetrics.* The origin of antisepsis in puerperal patients dated back to the works of Semmelweiss, a clinical assistant in the lying-in hospital at Vienna, in 1847. He claimed that puerperal patients generally were most frequently attacked with puerperal fever when examined by physicians who had themselves been in contact with cadaveric decay; and that the ordinary method of cleansing the hands was not sufficient to remove the poison which had attached to the hands in post-mortem examinations. According to the statistics of the Berlin Society of Obstetrics, *puerperal fever* causes fifteen per cent. of the deaths among women during the period of sexual activity, and this death rate nearly equals that of smallpox or cholera. Cellulitis, metritis, peritonitis, and like diseases, have a similar origin to the disease under study, all having their cause from the poison existing primarily external to the body of the patient. The healthy human organism cannot become the host of bacteria. A breach in the continuity must exist for their entrance into the system.

Quoting Koch, he said pyæmia does not arise, as once believed, from the entrance of pus into the blood vessels, and septicæmia is not putrefaction of the living blood. In other words, the entity of these diseases depends upon bacteria, and the different forms depend upon the differences in the forms of these microbes. The conclusions are that the name puerperal fever is used for the sake of convenience, applied to a group of symptoms which represent the effects upon the system of one or more varieties of bacteria, and the disease has its origin directly from traumatism. He inclines to the belief that the *bacteria* giving rise to this disease are essentially different from those existing in health in the vaginal canal, or in the mouth or throat. He gives these to be as follows: 1st. Long cylindrical filaments, appearing in rapidly fatal septicæmia. 2d. Steptococci, or micrococci, appearing in chains, in milder forms. 3d. Diplococci, micrococci occurring in pairs, especially in suppuration. 4th. Micrococci in irregular masses. These may occur singly or together in a given case.

The practical result of the study of puerperal fever, based upon the believed germ theory of disease, is the protection of the lying-in woman from these germs. This he believes has been done, and cites in proof the work done in the Maternity at Vienna, the records of Spiegelberg, of Brussels,

Lusk's citation of Streng's statistics, from the Maternity in Prague, Goodell, in Philadelphia, and Garrigues, in New York. He does not believe that the details laid down as necessary for the conduct of a case in the large maternities will be necessary in private practice; but the general principle applies as well to the private physician as to him in charge of a lying-in hospital. The details set down bring bichloride of mercury, in 1–3,000 solution, iodoform, solutions of carbolic acid, of varying strength, as being best adapted to insure the safety of the parturient woman.

In his remarks on the advance in gynæcological operations, he quoted *Bartlett's* (of Chicago) *modification of Porro's operation*, which consists in removing the uterus from the vagina instead of through the abdomen. To accomplish this, inversion of the uterus is effected by passing a Wells' clamp into the body of the womb and fastening it at the fundus, which is dragged through the cervix into the vagina, and a clamping wire is immediately adjusted, and excision of the uterus and appendages effected at a suitable distance from the vaginal continuation. The several steps with reference to the stump and hæmorrhage are about as in Porro's operation. Following the teaching of Lusk, Dr. Littlejohn claims that the demand for the *use of ergot* follows the occurence of post-partum hæmorrhage following uterine atony. Otherwise its use should be limited. He speaks of the increasing number of cases in which removal of the ovaries and uterine appendages have been practiced, and joins in the growing sentiment that the operation has been too frequently performed. The rest of the paper was devoted to recounting the minor improvements in gynæcological instruments and lesser operations of this department.

Dr. W. J. Jones, in moving the reference of Dr. Littlejohn's paper to the Committee of Publication, spoke in terms of praise of the production. He then spoke at some length on the issues made by the germ theory.

The President requested Dr. Wm. C. Dabney, Professor of Obstetrics and Diseases of Women in the University of Virginia, to open the discussion.

Dr. Dabney said there was very little he could add to the paper. One or two practical points might be brought to the attention of the Society—one in respect to what is called *puerperal scepticœmia*. That very many of these cases are due to the germ, there can be no manner of doubt; still there were cases in which, as soon as all decomposing matter was removed, there was no further trouble, and the fever imme-

diately disappeared. Now, truly, this would not occur were the symptoms due to a septic germ. The poisoning in these cases is due, not to the presence of germs, but to the presence of decomposing animal matter, commonly known as ptomaines—these leucocytes of decomposition. The symptoms in many cases are the same as those which can be produced in the lower animals by the introduction of ptomaines under the skin. This Dr. Dabney designated *puerperal toxæmia*, and said that a removal of the exciting cause—generally filth and a want of care for the lying-in woman—would relieve the patient; but this would not obtain when the woman had become the host of the germs which caused the outbreak of puerperal septicæmia, and which required alike local and systemic treatment. So far as he knows there is no germicide which can be administered, of sufficient strength to destroy the germs, which will not also destroy the life of the patient. What, then, can be done practically? First, abolish the circumstances which favor the development of the germ—have a strict regard for cleanliness. This is, by far, the most important point. In other cases of threatening symptoms, followed by fever, see that there is no decomposing matter in the vagina or in the uterus. It may be a case of ptomaine poisoning. But suppose it is not that, but a genuine case of septicæmia? A want of cleanliness favors the production of germs. There is nothing like injections to remove this decomposing matter, and he favored the use of bichloride of mercury. There are instances of poisoning by injections of corrosive sublimate, but they are few, and he had never known one when the solution was as 1 to 2,000. From his experience with injections into the pleural cavities, he thought as efficacious results would be obtained from iodine. He thought it not desirable in country practice to use such extreme antiseptic precautions as were suggested by Dr. Thomas several years ago; but it is necessary to remove every particle of dirt and blood, at least from the external genitals of the woman, for it is there that these germs begin their work.

Prof. J. McLane Tiffany, of the University of Maryland, said it was eminently improper for him to speak on an obstetrical subject. Something had been said about abdominal surgery, but he denied that this belonged to obstetrics, but to surgical gynæcology. We are now in the midst of our study of bacterial pathology and are not yet perfect. If he were asked as to the most potent means of avoiding this enemy, he would say "a good nail-brush and soap and water." The

first thing is to clean the doctor and then the patient. He mentioned the success in the treatment of wounds in the mountain regions far removed from large cities, and the experiments which proved the entire aseptic condition of the air at sea. Be sure that thé hands are clean before the operation. The surgeon should operate with sleeves rolled up and his arms washed to the elbows. He should see that the person of his patient is thoroughly cleansed. Absolute cleanliness is, of course, antiseptic. A germicide does no harm, but first of all comes soap and water. All vessels and instruments to be used should be thoroughly cleansed before an operation. The use of hot water is important, not only to overcome shock, but to wash out from the cavity any germs which may have found entrance. In regard to the best germicide, he believes that bichloride of mercury holds that position. Ether or oil of turpentine will remove the oil from the skin, which soap and water will not accomplish, and his preference is for turpentine. He thinks that all antisepsis, with our present knowledge, can be obtained from soap and water, the nail-brush, and the bichloride solution.

Dr. J. J. Chisolm, Professor of Eye and Ear Diseases in the University of Maryland, said the part of surgery in which he is engaged would seem entirely unconnected with the subject in hand. But he explained that there was a connection, and that this micrococcus was the connecting link. One of the most common of eye troubles, and which is a most common cause of blindness, is the entrance of a germ into the eyes of the child from the vagina of the mother. After a few days it creates an ophthalmia, which, if allowed to go on, results in the loss of the eye. It is an established law in some hospitals that every child, immediately after birth, should have distilled into its eyes, whether ophthalmia was suspected or not, a solution which will destroy any bacillus capable of causing a destructive inflammation. The effect of this protective system is most marked. In eye work the surgeon is bound to be cleanly, for the instruments are very delicate and must be kept clean to be in order. A very weak solution, not strong enough to produce irritation, is capable of destroying the germ.

Dr. Cullen said, in regard to puerperal fever, you find many cases occurring in persons on whom the antiseptic treatment was rigidly practiced, and in others where it was not used at all. For the past fifteen years he has always injected the vaginal cavity, and, in anything like metritis, the

uterine cavity, with an antiseptic. He has used vaginal injections for several years, and has had but one case of puerperal fever in two and a half years. He does not touch the vaginal canal with the hand after the child is born, but washes the vulva with the bichloride solution. He thinks that an immense amount of puerperal fever is caused by bacteria carried into the uterine cavity by the hand. Practicing physicians cannot always surround the woman with these precautions against bacteria, but they can best protect her by washing their own hands. He attributed to antisepsis the great reduction in Germany in deaths from puerperal fever, whether injections are used or not, if, in addition to cleanliness, the hands are kept out of the vaginal canal.

Evening Session.—Called to order at 9 o'clock.

Dr. George Gillett Thomas, of Wilmington, read the annual essay, which was referred to the Committee on Publication, entitled

Hepatic Stimulants and Cholagogues.

He opened the discussion by reviewing the functions of the liver with particular reference to its property of separating from the peptones received through the portal blood such properties as would be dangerous to life if this blood were to enter immediately into the general circulation. He recited, somewhat in detail, the experiments of the German physiologists to demonstrate the presence of these poisons in this blood and their action when injected into the body of an animal other than the possessor. He called attention to the possibility of this poison being closely allied to the bodies known as ptomaines. This portion of the liver function occupied most of the time devoted to its study. He briefly referred to the sugar-making property of the liver, its power of destroying red blood corpuscles, their hæmoglobin and the manufacture of the coloring matter of the bile and the increase of white blood corpuscles; at the same time the separation and preparation for elimination of urea and uric acid by the kidneys, and its well known property of secretion and excretion of bile.

This brought him to the study of the different medicinal agents which have been used to restore the liver to its normal functions from the diseased state; and he held that, given a morbid state of the liver with lessened biliary secretion, all other functions would likely to be in abeyance, and drugs exhibited for the restoration of this function to its normal standard would restore the whole of the organ to

healthy action. Following in the list of Lauder Brunton he gave a resume of the authorities on the drugs known as hepatic stimulants and cholagogues. Reaching, at the close of this list, the study of the mercurials, he recited the experiments set up to determine the value of these agents for the purpose of stimulating the liver to the increased secretion of bile, and gave a full account of the work of Rohrig, in Germany, George Scott, in London, John Hawks Bennett's Edinborough Committee, and the excellent work of Rutherford and Vignal, all of which had special reference to the value of calomel and blue pill as hepatic stimulants. To this he added the opinions of later authorities on this subject. He closed by quoting Fothergill's defence against the outcries of the medical nihilists which had been written against the use of mercury, not only for diseases of the liver, but for the cure of syphilis.

The President announced the committee on the Proposition of Dr. White, from the Virginia Medical Society—Drs. W. T. Cheatham, R. F. Lewis, Geo. G. Thomas, Simmons B. Jones, and H. B. Weaver.

THURSDAY, SECOND DAY—*Morning*—Meeting called to order at 10½ o'clock by the President.

Dr. J. W. Jones, for the Finance Committee, reported, that, having carefully examined the Treasurer's books, they find a balance on hand of $433.97.

The next order of business was the subject for general discussion, Dr. W. P. Beall, of Greensboro, leader:

Are the Dangers of High Temperatures in Acute Diseases Overestimated?

Fries, in 1853 or 1854, popularized the application of cold in fever as a valuable remedy. He claimed it was almost a universal panacea, and as time went on he became more and more pronounced in the application. Then came Liebermeister with quinine, and he also recommended Fries' treatment, but if he were restricted to the use of one, he would take the quinine. Following that idea, our patients in typhoid fever have been cinchonized as soon as the temperature has gotten 101° or 102°F. The idea seems to be that the temperature is the one thing to be considered in all diseases, and if that can be kept down other symptoms could be regarded as of minor importance. A healthy reaction is springing up in this matter of reducing temperature at all hazards, and the fact is being admitted on all hands, that fever itself is not a disease—it is merely one of many symp-

toms. Experience in this country has shown that our typhoid fever cases and others, in spite of cold baths and quinine, have ended fatally—or should he say on account of these agents? and that relapses have become more common since this antipyretic treatment has come into vogue. The existence of so many antipyretics shows they are all unsatisfactory. We seem to be losing sight of the fact that fever is not the disease. Fever is deemed now, he believed, to be a neurosis, and the so-called germs of disease are considered the primary cause of all acute troubles, and the fever is only one of these symptoms. Experience proves that one patient will bear a temperature of from 102° to 104°F., and will make a good recovery with or without antipyretic treatment, while in another much more dangerous symptoms manifest themselves with the same temperature and the same treatment; yet the former should be considered the more dangerous case. In a recent discussion in the New York Academy of Medicine, Dr. Loomis and numerous other lights of that Society, arrived at the conclusion that antipyretic treatment as a means of curing disease is a failure, although they did not state it in such absolute terms. When called to see a case of typhoid fever, for example, if we lose sight of the fact that the high temperature may be due to the excitement of the system brought on by disease germs, and pour antipyretics into the patient in large doses, we do a harm. Quinine, in antipyretic doses, is a heart paralyzer, and we run great danger in giving it in large quantities. Antipyrin, according to Beaumetz, destroys the blood corpuscles, and, while the most harmless of antipyretics, it checks secretion, and is apt to do more harm than good. The comfort of the patient may be enhanced by the use of these remedies, but he objected to their indiscriminate use. We are tending too far toward the extreme in the use of antipyretics. In ordinary acute diseases, by keeping the emunctories active, especially the kidneys, we can attain a more satisfactory condition for the patient than will ensue by reducing the temperature by medicine.

Dr. Bullock mentioned the case of a lady who died in his house from typhoid fever, whose temperature, notwithstanding enormous doses of quinine, continued to rise and increase after death, until fifteen minutes after breath had left the body it reached 106¾.

Dr. Charles J. O'Hagan, of Greenville, thought the hyperexia in acute diseases was an important point to be combatted. He defined pyrexia as being a temperature ranging to

103°; anything above that he would class as hyperpyrexia. This matter has received much attention of late years, and the general line of thought has been to localize the origin of excessive heat in the nervous centres, the pons and the medulla oblongata being the nervous centres of heat-production. In all these diseases we find that death takes place at the heart from paralysis, and that paralysis is produced to a great extent by the hyperpyrexia, and we must combat that fatal result. He did not believe in the extreme treatment of the German physician, who plunged the soldiers into baths at a temperature of 30 or 40 degrees. He had read Liebermeister on quinine as an antipyretic, but that would not do here. There is great good to be accomplished by holding the pyrexia within the danger line. You diminish the tendency to death by keeping the fever within this point. When the great London physician sat by the bedside watching the temperature fall, without medicine, he found his patient got well. That case of pyrexia did an inestimable service to the profession. He proved that nearly all these diseases run a definite course. The deductions from this are that all physicians ought to do something to sustain life and prevent symptoms from assuming such dimensions as will cause changes in the body that will be dangerous to life. He had never seen any benefit from heroic doses of quinine, but has seen much harm. Thought there was sometimes a vast amount of good to be derived from the use of water. The brain suffers from the pyrexia; then the extraordinary tension and effort of the heart cause danger of cardiac paralysis, and thereby death. One of the most important things is to preserve that organ in its integrity. When the temperature is below 103° he avoids physic as much as possible, and keeps it within this limit, letting the disease run its course, for this it will do. We know that antipyretics will not abort the fever, but they will keep it in bounds. He favored the application of water to the outside of the body. In regard to the temperature rising after death, he could not give a correct answer, but knew it to be a fact. He mentioned a case of typhoid fever which kept a temperature of 108° for several days and then got well in spite of him.

Dr. Cullen mentioned a case in which temperature kept at 107½° for forty-eight hours. There was a treatment neither by cold water nor by quinine. He had often had the temperature in surgical cases to reach 105° or 106°. For a long time he had forbidden the use of quinine in hyperexia in typhoid fever, and mentioned the case of a

boy fourteen years old, in which the fever held on for three weeks with the temperature at 104° or 105°. He gave him antipyrin very cautiously in eight-grain doses, warning the mother to notice if he had sweat and rapid pulse. He was soon sent for again, and found patient in a cold perspiration, pulse almost gone, and lips blue. Gave hypodermic injection of whiskey to bring him round. Did not think you could abort the fever with cold water, but you can keep it down. What is gained by keeping down the temperature? If you gain a respite of only twenty-four hours it is valuable. You excite a typhoid fever patient by putting him into the bath. He always sponges his patient. It has a soothing effect on the nervous system, makes the patient passive, puts him to sleep, and does as much good as a cold immersion in water at 68° or lower.

Dr. Wm. C. Dabney, of University of Virginia, said he was fully in accord with Dr. O'Hagan. He thought that fever may be due to two chief processes, that is to say an excessively high temperature, defective heat loss, and excessive heat formation. Now it is rendered certain by the experiments of late years, that in the vast majority of cases of hyperexia there is an excessive formation of heat, and this is due to oxygenation. Why? Because the experimenters have weighed carefully the amount of urea discharged, and also estimated the amount of carbonic acid gas, and found there was an increased amount of both. It could be due only to excessive oxygenation. So our treatment should be, in those cases where the skin is bathed in sweat, showing that the heat loss is abundant, to give remedies that will check the formation of heat. First, as to the danger of hyperexia, he had no doubt that a temperature over 102° calls for some treatment. He considered pyrexia to be an abnormal temperature below 103°, and anything above that he would class as hyperexia. In these cases of hyperexia remedies are needed. He has given antipyrin several hundred times—a good many times in his own family—and has seen only a single case of collapse. To a lady who had puerperal toxæmia, he gave the dose recommended by Delaney of thirty grains, and told the nurse if, at the end of an hour, the temperature remained at 105°, to give another dose of thirty grains. Nurse gave second dose without taking temperature, and on returning he found it 95° with pulse 40. This case ended favorably. The dangers of collapse are slight. This is the only antipyretic which does not produce cardiac failure. Parenchymatous degeneration of the heart muscle is due to high

temperature, but there is no question that this hyperexia tends to cause heart failure. He has tried quinine in large doses, but was not satisfied with the effect. He has also tried salicylic acid; but of all antipyrin has been the most satisfactory. The dose of twenty grains+30+15, as recommended by its great champion, Delaney, is too much. Fifteen or twenty grains, repeated in one hour, will almost invariably reduce the temperature two or three degrees, and keep it down for twelve hours. He has never seen it kept down twenty-four hours under antipyrin, but has twelve hours, time and again. His rule has been to give it in fifteen or twenty grain doses whenever the temperature gets above 103°. Has never had much experience with cold water, but has tried cold sponging and likes it exceedingly. He tried wet pack in the case of a young lady found unconscious in bed with temperature of 109°. On using the catheter he found a small quantity of highly albuminous urine in her bladder. She was put in a wet pack, but died in two or three hours.

When you lessen the calibre of the blood vessels in the skin, you throw more blood on the internal organs, thereby augmenting the danger of hæmorrhage from the bowels, and this he regarded as an argument against the external use of cold. He said he had found antipyrin valuable as a styptic. It lessens very much the danger of hæmorrhage. He does not use antipyrin till the temperature reaches 103°. There is no hyperexia till that point is reached. Below that the fever is attendant upon many diseases.

Dr. D. B. Frontis asked if we cannot use some measures for reducing the temperature which will have some therapeutic effect other than that? He did not think it best to treat hyperexia for itself alone. So far as he knew, no therapeutic effect is claimed for antipyrin other than the reduction of temperature. But there are two classes of cases where it has other effects. In the hyperexia of malarial fever it contracts the vessels of the viscera more than the peripheral vessels. For that reason it would give good results in that disease. He spoke of the hyperexia from indigestion. We may relieve the intestine, or think so, and go as far as we can in counteracting that trouble, and yet the temperature remains high. One full dose of antipyrin will reduce the temperature, and probably that will be the last of it, since the cause has been removed. It has a valuable effect upon the nerves and nerve centres. He does not think it fair to consider quinine only as an antipyretic. It has, unquestionably, a therapeutic effect as antiseptic, and it has a controlling power over in-

flammation whenever and wherever it exists. He has been using antifebrine for the past three months, and draws the conclusion that it does not act so quickly as antipyrin, but is far safer. He has never had any alarming effects in chills. It produces a good deal of perspiration, but comes on slowly. When the temperature rises again we do not have the initiatory chill.

Dr. Booth called attention to two facts in relation to disease. One, that it is the intrinsic tendency of every animal economy to throw off disease. Another, that the destructive metamorphosis comes on more rapidly in a high temperature than in a low one. In the treatment of typhoid fever, if we will keep the temperature down and prevent this destruction and sustain our patient, he will get well. It has been the custom to treat typhoid fever by supporting the patient, preventing excessive diarrhœa, and thereby lessening the risk of perforation of the bowels, etc. Recently we find we can lessen the duration of that disease by giving antipyrin. He believes quinine in typhoid fever does a great deal of harm. The duration of the disease is from four to six weeks, but the administration of proper doses of antipyrin will shorten this period. He believes he has aborted many cases of pneumonia with antipyrin. The main point he wanted to make was that in cases where we did not know what causes the trouble, if we sustain the patient and keep the temperature down, he will, ordinarily, get well.

Dr. Graham introduced to the Society Dr. McAden, who had come as a delegate from the Druggists' Convention. Dr. McAden stated that at the last session of the State Pharmaceutical Association the question was raised as to the *best plan to prevent druggists from prescribing* for patients; that it was trespassing on the domain of the physician. In that discussion a resolution was offered and a committee appointed to present it to this Convention. The resolution is as follows:

"*Resolved*, That T. C. Smith, L. R. Wriston and J. H. McAden be appointed a committee to wait on the Medical Convention at Charlotte, next year, and request that body to *discourage the practice on the part of physicians of selling medicines*—thus encroaching on the domain of pharmacists, and affecting their business injuriously. This Association will endeavor to prevent its members from interfering in any way with the practice of physicians."

In presenting the resolution, Dr. McAden said that the Committee, who were all residents of Charlotte, had no

complaint to make against any physician there, each physician and each druggist standing legitimately upon his own territory.

On motion of Dr. Summerell, the chair appointed a committee of three, consisting of Drs. R. L. Payne, W. J. Jones, and S. D. Booth, to take into consideration this resolution, and report to this Society at a future hour.

THE CONJOINT SESSION WITH THE STATE BOARD OF HEALTH

was called to order by Dr. J. W. Jones, of Tarborough, President of the Board of Health.

Dr. Jones read his Annual Address.

After the reading of the President's Address, an election was held to fill the vacancies caused by the expiration of the terms of Drs. R. H. Lewis and R. L. Payne, as members of the Board of Health.

Dr. O'Hagan put in nomination Dr. R. H. Lewis, of Raleigh, saying that Dr. Lewis had been one of the hardest workers and most useful members of the Board. Dr. Lewis was unanimously elected by a rising vote.

Dr. R. L. Payne, of Lexington, was nominated and unanimously elected to succeed himself, but said that he must ask to be allowed to decline. He had been a member of the Board eight years. Dr. Payne's resignation was accepted with regret.

Dr. H. T. Bahnson, of Salem, being nominated, was unanimously elected to the position.

The President announced that there were several interesting papers to be read, and at his request, Dr. S. S. Satchwell read a paper on the "Drinking Water of Eastern North Carolina."

Dr. R. H. Lewis rose to acknowledge the services of Mr. Henry E. Fries and Dr. J. H. Stacill, members of the last General Assembly, in looking after the interests of the profession during the last session of the Legislature. He wished the Society to know to whom they were indebted for the safety of the laws affecting its interests.

Adjourned until 3:30 o'clock, P. M.

The *Afternoon Session* was called to order by Dr. Jones at 3;30 o'clock.

Following the order of business from the morning session, Prof. W. G. Simmons, of Wake Forest, read a paper on **Illuminating Oils.**

He gave an interesting sketch of the discovery of petro-

leum, and the uses to which it was put in ancient days. Rock oil is usually associated with common salt, the salt-water being pumped up with the oil into a common receptacle, in which the two liquids slowly separate. The proportion of the oil to the salt is very variable; but the general rule is, *no brine, no oil.* In Sicily, rock oil was collected and burned in lamps before the Christian era.

In the latter part of the last century, a spring of oil was struck near Pittsburg, but it was only used as medicine, and put up in bottles and sold at high prices. At the beginning of the present century, a gallon of oil sold for twenty dollars. It thus appears that petroleum acquired considerable reputation as a medicine long before it was used for illuminating purposes; and there is no doubt that it has therapeutic value when used externally for rheumatism and chilblains; and when taken internally, it is expectorant, antispasmodic, and diaphoretic.

Various opinions have been advanced as to the genesis of rock-oil. Without doubt, it has originated from the decomposition of organic materials. One authority holds that it is the product of the destructive distillation of woody fibre by volcanic heat. Another regards it as resulting from the decay of certain highly resinous trees of a past geological age; and another thinks that its origin is the decomposition of the lowest forms of marine life.

To be utilized for illumination, the crude oil must be refined—separated from its complex materials by distillation. At a moderate temperature, inflammable vapors are given off, and the removal of these is necessary; for if allowed to remain in it, they would, at comparatively low temperatures, form highly explosive mixtures with atmospheric air. These vapors are readily condensed into inflammable liquids, such as rhigoline, gasoline, benzine, etc., which promptly mix with each other, forming *naphtha.* There being but little demand for these, the refiners are constantly tempted to leave them in the oil.

The second product of this distillation is *kerosene*, or *true illuminating oil.* It has a higher specific gravity than naphtha, boils at a higher temperature, and is less inflammable; and for economy and excellence of the light afforded by it, is unequalled by any other illuminating material of ancient or modern times.

The crude material also contains *paraffine*, which has a higher boiling point and higher specific gravity than kerosene, and if allowed to remain in the oil, would impair its combustibility, and gum and char the lamp wick.

The object of refining the oil, then, is to get rid of the naphtha, on account of its excessive, and the paraffine, on account of its defective combustibility. The excess of naphtha renders the oil dangerous, and an excess of paraffine causes it to become opalescent, and even to freeze in cold weather.

There are refiners who, though they profess to do so, do not effect the separation of these materials; while there are others who purchase the most costly kerosene and the cheaper naphtha, and deliberately mix them and sell the mixture as genuine kerosene. If the extra profit they make were the only result, the evil might be tolerated; but we cannot be expected to repress our indignation when we consider the terrible consequences which result from the use of these oils, which are more dangerous than gunpowder. Notwithstanding legislation in many States against the manufacture and sale of these low-grade oils, the markets are kept well supplied with them, and the legitimate result is, many lives are lost and much property is destroyed.

He gave as a simple test for the quality of oils the following: Fill a tin-cup to within an inch of the top with water warmed to a temperatue 120°F., and pour in three or four tablespoonfuls of oil. After stirring the oil and water together thoroughly, add sufficient cold or hot water to bring the contents of the cup within one degree of 120°; wait long enough for the oil to rise to the top, then apply a lighted taper on a level with the top of the cup. If within one second there is no flash, the oil is reasonably safe; otherwise not.

Oils that can be raised to 140°F. before giving off inflammable vapors, may be burning in the lamp; the lamp may be broken, and only the ignited wick will continue to burn. But if the oil will flash below 100°, the lamp, if broken, will be enveloped in flames, as will likewise all with which the oil comes in contact.

North Carolina has never taken any steps to protect her citizens against dangerous oils. Poor people will buy the cheaper oils, and the pressure should be applied, not to them, but to the vendors, who should be compelled by law to sell only safe oils.

In 1870, Michigan created the office of State Inspector of Illuminating Oils. Before the enactment of this law, nearly every paper gave an account of "Another Kerosene Horror," but since then scarcely a single accident has occurred in the State from kerosene oil. Such a law would be of more vital importance to the people of this State than al-

most any on our statute books. As no test is required in our State, the best oils are sent to New York and Michigan, where it can pass the high tests required by those States, while the poorest are sent to us, because we receive them without scrutiny, because nobody else will have them. There is no virtue in the powders which are hawked about the streets, and which are credited with virtues which will prevent kerosene explosions. They are nothing more than common salt colored with red analine.

He cited extracts from the laws of several States on the subject. In Michigan, oils offered for illuminating purposes must not emit a combustible vapor at a temperature of 140°F., and must remain transparent when cooled to a temperature of 20°F. for ten minutes. In Indiana, they must bear a fire test not below 140°F., and the flash test at not less than 120°F. In Illinois, those oils which will not ignite or explode at a temperature less than 150°F. are marked by the Inspector on the package, "Approved, Fire Test being——;" but if they will ignite at a temperature less than 150°F., the package is marked, "Condemned for Illuminating Purposes—Fire Test being——."

To ascertain the nature of the oils sold in North Carolina, Prof. Simmons tested twenty-nine samples from retail dealers in his reach, with the following result: One flashed at 84°, two at 92°, one each at 94° and 95°, four at 99°, one at 111°, two at 112°, two at 113°, three at 114°, two at 115°, two at 117°, two at 118°, and one each 119°, 122°, 124°, 129°, 131°, and 144°. The corollary from these is that legislation is needed in our State to protect our citizens' lives, health and property against the sale and use of dangerous illuminating oils.

Dr. McDonald moved that Professor Simmons' paper be referred to the Publication Committee, and that a committee be appointed to take steps towards the suppression of the sale of the low-grade oils in the State. Carried.

Dr. Haigh said that at the last meeting of this body, when an uncompleted paper was read on this same subject, he suggested that our people ought to be protected against those low-grade oils by the publication of these facts. This was not done an account of the incompleteness of the paper. It seemed to him that the time had now arrived when some publication of that sort should be made. Our Board of Health must show the people that we are working for their good. Here is the fact of the daily use of absolutely dangerous oils by hundreds of thousands of our citizens. With

this knowledge before us, is it not our duty to publish these facts? The names of these oils, of their manufacturers and of their sellers ought to be published, that the people may know what they are doing. It is the only way in which an attack can be made on these manufacturers in the absence of a law, and we would have to wait for nearly two years before such a law could be created. He moved that, as far as it is possible, these facts be published in the newspapers.

Dr. McDonald thought when these facts are brought before the Legislature in the proper form, something will be accomplished.

Professor Simmons explained that the samples had all been obtained from retail dealers, and he was hardly willing to hold the manufacturers responsible unless there was some way by which the identity of the oil could be traced back. He thought the proper place to apply pressure was on the sale of the oils.

Dr. Haigh thought if our State Chemist could publish to the world the analyses of different fertilizers, with their brands, there was no reason why these facts, which are of so much importance, could not be.

Dr. R. L. Payne, of Lexington, read a paper, entitled

Some Preventable Causes of Disease Among Women.

He remarked upon the want of care among parents, teachers, etc., in the management of young girls, and deprecated the lack of moral courage to resist the foolish fashions of society. Among the prominent preventable causes are improprieties in dress, the bad habit of half-reclining upon the back with the feet elevated, the long continued use of the sewing-machine, too early marriage, the want of outdoor exercise, and the defective system of female education. He spoke of the foolish habit of clothing babies insufficiently, leaving too much of the body bare, or only partially covered, and even this of such thin material as to make the child liable to cold, and so seriously to retard its growth. He deprecated letting girls of ten or twelve years wear corsets, high-heeled shoes, and heavy underskirts tied around the waist—the natural result being interference with the normal functions of the thoracic, abdominal, and pelvic viscera. The present mode of covering the lower extremities exposes them to cold winds and dampness arising from the earth. Very many girls never wear any covering upon their lower extremities except underskirts and thin cotton drawers.

Although he is not willing yet to see women wear breeches, he thinks their lower limbs should be protected by woolen garments of a character sufficient to protect them. He inveighed against the high-heeled, narrow-toed shoes worn by many women, declaring as the evil results of these shoes deformity of the toes and feet, and such displacement of the axis of the body in walking as to disturb the normal position of the pelvic viscera.

Inclement weather, or a want of proper accommodations, induced women to postpone an evacuation of the bowels and bladder until constipation, with its manifold evils, resulted. The unhealthy habit of sitting, half reclining, in chairs, with the feet elevated upon another chair or footstool, relaxes the muscles of the abdomen, throws the pelvis forward, and imposes the weight of the abdominal viscera, together with the pressure of corsets and underskirts, upon the organs in the pelvis. Of the sewing-machine, there was no doubt of this being a source of much disease among women—its immoderate use, rather than the danger of using a machine with some discretion, being the cause of trouble attributable to those otherwise useful articles of household furniture. He seriously objected to women entering into the married state at a very early age, believing that they can never safely undertake the duties of maternity until they have reached the age of twenty at least. Indoor life, sedentary habits, lack of fresh air, resulting in muscular weakness, a failure to make good blood and to permit proper digestion, are all conducive to the diseases of women. Of the education of woman, he thought the mistake of society consists in not recognizing, or, if recognized, not considering the destiny and noble purpose of becoming a good wife, a good mother, and a good friend. In the schools, girls are generally forced, according to the modern educational methods, without regard to the organic changes which are taking place, and the great need for monthly rest and the freedom from care required to develop their productive natores. He quoted the supporting opinions of Clark, Anstie, Weir Mitchell, and Goodell. He does not desire to cut short the education of women, but he wishes to impress upon those engaged in imparting knowledge to the gentler sex the necessity for remembering the wide difference in her organs and those of boys; the necessity for more rest, more fresh air and outdoor exercise, and greater care in the regulation of all her hygienic surroundings, particular attention being paid to the proper regulation of her catamenia. He summed

up his teaching by asserting that all the outdoor exercise of boys—the exercise of the gymnasium, the training of the military schools, and other means adopted for the full development of men—were matters of great importance; but they are as nothing compared with the benefits a man receives from inheriting the constitution of a healthy mother.

It was voted that Dr. Payne's paper be referred to the Publication Committee.

On motion, the Conjoint Session adjourned.

The Medical Society was called to order, President Bahnson in the chair.

The order of business being the continuation of the discussion from the morning session, Dr. Haigh moved that the time of debate be limited to five minutes to each participant. Carried.

On motion by Dr. Hays, Dr. J. A. White, Senior Surgeon of the Richmond (Va.) Eye, Ear and Throat Infirmary, presented a paper on

Eye Troubles of Reflex and Neurotic Origin.

After a few preliminary remarks on the *frequent* dependency of eye troubles upon diseases of the various organs of the body, he began the subject matter of his paper by dividing reflex troubles into those in the domain of the trifacial and those in the domain of the sympathetic. He discussed the various reflex eye symptoms from diseased *teeth*, from *nasal* troubles, from irritation of the *frontal* nerve, etc., with interesting records of cases in point, and a copious reference to the literature on the subject. In the domain of the sympathetic were included all eye reflexes from direct irritation of the cervical sympathetic, and from indirect transmission from the digestive organs as the result of worms, and from the sexual organs as the result of masturbation, phymosis, uterine and ovarian disturbances, and the anomalies of menstruation. Among such *reflexes* as shown by the cases referred to were ptoses, paralysis of ocular muscles, blepharospasm, irritation, hyperæsthesia, anæsthesia, and ischæmia of the retina, painful asthenopia, and amblyopia, etc. In passing from purely *reflex* to *hysterical* eye symptoms, Dr. White said it was very difficult to draw any line of demarcation between what might be called *reflex* and what might be only the local expressions of a general nervous diasthesis (neurasthenia or hysteria); because he believes that even where the trouble is clearly and demonstrably *reflex*, there is

always, in such cases, an underlying nervous diasthesis akin to or productive of *hysteria*, a fact proven by the abnormal irritability of the reflex nerve centres; and it is moreover well known that reflex troubles are more common in so-called hysterical subjects. He referred to many cases of hysterical eye troubles, and closed by a brief reference to treatment, especially recommending metallotherapy.

On motion, thanks were voted Dr. White, and the paper was referred to the Publication Committee.

Dr. Lewis, of the committee appointed to consider the recommendations in the President's message, recommended that the following be immediately adopted by the Society:

1st. That the *North Carolina Medical Journal* be declared the official organ of the Society; that its editors be *ex officio* members of the Committee on Publication, and that an edition of 800 copies of the *Transactions* be published within sixty days from the expiration of the month in which the meeting is held.

2nd. That the Secretary be instructed, by correspondence with some member in each county, to revise the present list of members, and, after revision, to record the same in the order in which they joined the Society, with the year of admission placed opposite each name, instead of alphabetically, as now.

3rd. That licensed or otherwise eligible physicians, desiring to unite themselves with us, but who may be prevented from attending in person, be allowed, upon application in writing, to do so, upon the endorsement of two reputable members of the Society, one of whom must be present and sign the Constitution for them and pay the initiation fee for them.

Dr. Satchwell moved the adoption of the report as a part of the Constitution of the Society.

Dr. Booth thought that portion concerning the admission of members involved a change of the Constitution, but could be adopted at this meeting by an unanimous vote. He moved that the report be read and acted on by sections, which motion was carried.

The *first* clause being read was adopted, only one voting "No." The *second* clause was adopted unanimously. The *third* clause, being read, was amended to read as it appears above, and was then unanimously adopted.

Dr. J. J. Summerell, from the Nomination Committee, made the following report, which was duly adopted:—*President:* Dr. D. T. Haigh, Fayetteville. *Vice-Presidents:*

Drs. W. T. Ennett, Burgaw; J. B. Dunn, Raleigh; Thomas E. Anderson, Statesville. *Secretary:* Dr. Julian M. Baker, Tarborough. *Treasurer:* C. M. Poole, Salisbury. *Orator:* S. D. Booth, Oxford. *Essayist:* W. C. Galloway, Snow Hill. *Board of Censors:* Drs. George G. Thomas, Wm. J. Love and W. W. Lane, Wilmington.

Dr. Joseph Graham exhibited a specimen of

Dry Earth Used by Him in the Cure of Tumors, etc.

Dr. Harrison, of Philadelphia, claims to have entirely reduced a fibroid tumor, weighing 30 pounds, in three months. The earth, which had been very efficacious in several cases treated by him, was the common yellow clay found superimposed above the red clay in all his country. In its preparation it has to be made very fine—as fine as flour—and wet, that it may be made to fit the abdomen. It is spread over the abdomen one-eighth of an inch thick. If made thicker it is apt to be cracked by the motions of the body. The first effect is a heat which can be felt three or four inches from the abdomen. He did not understand the *modus operandi* by which the good results were obtained. The idea occurred to him that he might get even better results by applying it internally, and he began the use of it on this plan. He applied it to the inner surface of the vagina by placing the patient in the knee-chest position and applying the plaster with a teaspoon, the bowl being turned up. During the first few days the earth should be removed every twenty-four hours. When one application is removed another is applied right away. It remains in place and gives no pain. He tried this treatment in a case of puerperal peritonitis with benefit. He exhibited a shell taken from a vagina after a few applications of this kind. It takes from five to seven days for the exfoliation to occur.

Dr. Summerell mentioned having used an earth manufactured in Baltimore in his practice at the poor-house in his county. He used it successfully in four cases of *sore legs* which had resisted all other treatment for years. Under this treatment they got well in two or three months. Where the sores were excavated the cavity was gradually filled up, and when the granulations appeared cicatrization went on as in ordinary sores.

Dr. Graham mentioned the use of dry earth in the treatment of *carbuncles*, the core being taken out and the pain relieved soon after the application.

Dr. Barringer had tried it in several cases with perfect result and rapid healing. He had seen the epidermis taken

off the skin by an application remaining on twenty-four hours. He has an idea that it is a vesicant and a desicant. A vesicant will lift up the tissue and leave a fluid serum beneath, but both combined will absorb the serum.

High Temperatures—Concluded.

Dr. W. P. Beall concluded the discussion, postponed from the morning session, by protesting against the interpretation of the subject by Dr. O'Hagan. His idea was that high temperature in acute diseases was held in too high esteem in comparison with other phenomena—that our attention had been directed to relieving the high temperature and not to the seat of the disease, and it was this fact to which he wished to call attention.

Autumnal Fevers—Are They Typhoid.

Dr. Carr asked as to our autumal fevers. They were called by some physicians typhoid, while others classed them as typho-malarial. In the absence of the characteristic typhoid temperature—a regular increase of one degree each day for a week, then remaining a week at a 104°, the third week remittent in character, and the fourth intermittent—he calls it typho-malarial, notwithstanding the fact that some persons disclaim the existence of such a disease. In these fevers the highest temperature reached will be about 103° or 104°, and this at his first visit.

Dr. Long thought they should be classed as typhoid.

On motion the discussion was postponed to the morning session.

Evening Session.—Meeting called to order by the President at 8:30 o'clock.

Dr. J. M. Hays delivered the *Annual Oration.* Many ladies and citizens generally were present.

Dr. R. H. Lewis, from the Committee on Prize Essays, said the committee had awarded the prize of $50 to Dr. Francis Duffy, of Newberne. The committee regarded the essay as a most excellent production.

On motion, Dr. Jones was requested to read the essay, and he performed the duty assigned him in a most satisfactory manner.

Dr. Duffy, instead of taking the prize, asked to offer it again as a prize for the best essay on "*The Treatment of Hæmorrhagic Malarial Fever*," to be presented at the next meeting of the Society. He would make known to the Secretary the conditions on which he offers the prize.

The Secretary read a telegram from Dr. N. J. Pittman, establishing the "Pittman Prize" during the remainder of his life. On motion, the Society voted to transmit their thanks to Dr. Pittman for his munificent liberality.

THIRD DAY—*Morning Session*—Meeting called to order at 10:30 o'clock.

Dr. J. J. Summerell, read the following resolution, which was adopted by a rising vote:

Resolved, That the North Carolina Medical Society has heard with great pleasure that our distinguished and long-loved member, Dr. Thomas F. Wood, though still on his bed of suffering, is improving, and while expressing to him personally our deepest, tenderest sympathy in his trial, we utter the hope that God may spare him to take again his accustomed place of usefulness in our annual meetings, and that many years of efficient work and honor may yet be his.

Case of Abdominal Section, with Remarks,

Dr. Cornelius Kolloch, Cheraw, S. C., President of South Carolina Medical Association, presented the following paper: A negro boy, aged fifteen and a half years, was shot in the abdomen with a Smith & Wesson pistol ball, 38 calibre, distance six feet. The ball entered the left inguinal region, a little above the sigmoid flexure of colon, passed obliquely upwards and emerged in the right umbilical region, about an inch and a quarter from the median line. Found the patient very restless with anxious expression of countenance, much thirst and a weak pulse; also a deep-seated emphysematous crackling sound around the external opening. There was hepatic resonance, which, though generally considered pathognomonic, may be caused by the transverse colon being placed between liver and the walls of the abdomen, or by slight displacement of the liver. The rectal temperature was decidedly subnormal. These signs clearly indicated intestinal perforation at one or more points. While preparing for a laparotomy there was a movement of the bowels and blood was passed. Small particles of fecal matter were observed escaping through one of the external openings. As the delay necessary to procure the assistance of another physician would be long and dangerous, the operation was performed with the assistance of a white man and two or three negroes. The patient had been troubled with diarrhœa, and had eaten nothing since dinner the previous day. The cavity was reached without much blood escaping

into the bowels, drawn out and kept enveloped in hot cloths. Three intestinal openings were found, two in the descending colon, a little above the sigmoid flexure, and one in the small intestine where the ball emerged from the cavity. An appendix epiploicæ, which was found lacerated and bleeding, was tied up with cat-gut and cut off. All oozing was stopped by hot water, one vessel having to be ligated. The edges of the intestinal openings were pared and drawn together by Lembert's suture, the stitches being placed only a line apart. The needle was introduced more than a quarter of an inch from the opening and brought out again about the eighth of an inch from the edge of the wound on the same side, having penetrated to the submucous tissue. On the opposite side it was introduced about one-sixth of an inch from the opening and brought out a quarter of an inch from it.

The advantuge of this precaution is that when the sutures are tightened the mucous membrane was inverted and the serous surfaces brought in contact. Serous surfaces unite readily when brought in apposition, but no union can posssibly be effected between two mucous surfaces or between a mucous and serous surface.

The peritoneal cavity was mopped out and a steady stream of hot carbolized water was kept up till it came out clear. The incision was closed by five white silk sutures, supported by adhesive strips—the whole enclosed in a gauze dressing and an elastic flannel bandage. The bowels were kept locked up by morphia for eight days, during which time not a particle of food was allowed, except occasionally a small glass of fresh milk. On the eighth day the sutures were removed; the wound had healed by first intention; all dressing except adhesive strips and flannel bandage was removed, and the patient allowed a light diet of peaches and milk and mush and milk for a few days. When he resumed his regular habits on the ninth day, there was a healthy, natural action of the bowels, with no pain or inconvenience. The patient recovered without a bad symptom, and is now, more than three months since the operation, perfectly well and attends regularly to the duties of a farm hand.

Dr. Kollock corrects the statement made by Dr. Morton in the *Medical News* of February 19th, in which he gives the first case of gun-shot wound treated by abdominal section as having been done by Dr. Kinloch, of *North Carolina*, 1881, and that of the first recovery as that of *Kocher*, of Switzerland, 1883. Dr. Kinloch has always resided in *Charleston, S. C.*, and his operation was done in 1862 on a soldier in the

Confederate army. It was *successful* and the patient lived a good many years after it.

[We have waited until the last possible moment (May 3d) for the balance of this report from our Special Reporter, and have to go to press with an incomplete report, which we greatly regret.]

Analyses, Selections, etc.

Cancer of the Liver.

In a paper read before the Tri-State Medical Association, by S. T. Armstrong, M. D., Ph. D., Passed Assistant Surgeon U. S. Marine Hospital Service, the author, after some general remarks on the important part played by the liver in the human economy, the disturbances consequent upon diseased conditions of that organ, and the frequency with which grave hepatic troubles occur in the Southern States of the Mississippi Valley, gives the following table of the death-rate from cancer, and the proportion in which the disease was located in the liver:

MORTALITY STATISTICS OF NEW ORLEANS.

Year.		Total Mortality.	Mortality and Per Ct. Cancer.	Mortality and Per Cent. Cancer of Liver.
1882	White	3582	113— 3	10— 14
	Black	2340	30—1.3	
1884	White	4366	112—2.7	9— 8
	Black	2784	37—1.3	2—5.4
1885	White	4325	100—2.3	11— 11
	Black	2348	35—1.5	4— 11

The statistics of New Orleans were chosen as the most reliable. As a means of comparison, Dr. Armstrong introduces statistics from the U. S. Marine Hospital Service from 1881–1886 inclusive:

Year.	Mortality.	Cancer Mortality.	Cancer of Liver.
1881	455	7	2
1882	485	12	2
1883	502	7	3
1884	489	6	4
1885	384	6	2
1886	407	4	2

The following classification with sub-divisions made by the writer, is based on the nomenclature of the Royal College of Physicians. All cases of cancer of the liver belong to the class of proliferation tumors, 1, Connective tissue tumors, cavernous angioma, fibroneuroma, sarcoma, lymphosarcoma, melano-sarcoma; 2, Epithelial tumors, carcinoma, including medullary, scirrhous and colloid. These exist as single tumors or as cancerous infiltration. Primary cancer of the liver is much rarer than secondary. The symptoms, etc., may best be considered in the reports of the following cases:

CASE I.—*Diffuse Carcinoma of the Liver.*—Italian laborer, aged 61, had been usually healthy, but was subject to much exposure, and was a hard drinker. He was admitted to St. Louis City Hospital on October 22d, 1879, for pain in the small of the back and left hip. In 1852 he had a single sore on his penis treated and cured without secondary sequelæ. Respiratory and cardiac murmurs normal. The diagnosis was rheumatism, for which he was treated without benefit. On November 27th a swelling was noticed in the right hypochondriac and lumbar regions following the outline of the liver. The area of hepatic dullness was greatly increased in all directions. He grew weaker and more emaciated daily, lost appetite, was constipated, and became jaundiced; localyzed pain was present and his urine was colored by bile pigment. Died December 2d, 1879. The surface of the liver was nodulated. CASE II.—*Encephaloid Cancer of Liver, Secondary to Cancer of the Pyborus.*—White male, a contractor, first seen in consultation with Dr. F. L. Sim, of Memphis, in June, 1886. The patient had been treated with some benefit by Dr. Sim for what appeared to be malaria. The liver extended from the fourth intercostal space to a point a half inch below the umbilicus and across the abdomen to the line of the left nipple, and the surface of the liver nodulated. Pain excessive, and constipation. The family history was one of cancer, a number of the patient's relatives having died with that trouble. In this instance cancer of the liver was diagnosticated. The patient died July 25. CASE III.—*Scirrhus and Angioma.*—Mulatto woman, aged 40, with history of previous treatment for malaria, with hepatic complication. The liver was greatly enlarged and the other symptoms corresponded with those of the two preceding cases. The examination was made in consultation with Dr. W. P. McIntosh, U. S. M. H. S., and cancer diagnosed September, 1885. On July 21st symptoms

suddenly increased in severity, bloody diarrhœa set in, and the patient died July 26th. In each instance the diagnosis was confirmed by the autopsy held a few hours *post mortem.* (*Miss. Val. Med. Monthly*, April, 1887.)

Gunshot Wound of Intestines—Resection of Bowels—Death.

Dr. George Cupples, of San Antonio, Texas, reports (*Daniel's Texas Med. Journal*, April, 1887) the case of a lady who shot herself at 4 P. M., October 21st. The 41-calibre bullet entered at the lower edge of the right hypochondrium, traversed the peritoneal cavity, missing the liver, grazed the peritoneal surface of the abdominal parieties, passed through a knuckle of the ilium, making four wounds, all within a length of bowel of about three inches, and lodged in the integument. With the assistance of Drs. Watts, Lowry, Kingsley, Barnitz, and Johns, Dr. Cupples made an incision of four inches in the linea alba, entered the peritoneal cavity and resected the wounded portion of the intestine. The two ends were carefully adjusted and united by two rows of Lembert's suture, comprising about thirty-nine sutures. The peritoneal cavity was thoroughly cleansed and the abdominal wound closed by three silver wire and four silk sutures. The operation was done in one hour and fifty-five minutes. Collapse with vomiting ensued, and the patient died at 1 A. M., five hours after the operation.

Immense Fibroid, involving Uterus and Ovaries—Explorative Laparotomy—Adhesions too Extensive for Removal.

Dr. A. W. Acheson, Denison, Texas, reports an interesting case from the fact that a previous operation had been attempted but abandoned for unknown reasons. After this the patient sought surgeon after surgeon, all of whom refused to operate, because the woman insisted that if the operation was begun it would have to be completed, regardless of consequences. Failing after years of search to find any one willing to operate under these conditions, she concluded to submit to an exploratory operation, which was done February 12th, 1882—the abdominal incision being fourteen inches in length. Adhesions were found so numerous, particularly around the bladder, that the operation was discontinued. In half an hour after the operation she got out of bed and waived her handkerchief to some friends; in four hours she sat up, and was up half the time for the first week, at the end of which she planted a garden of potatoes, and on the eighth day climbed a fence seven feet high. The woman

died two years afterwards. A post-mortem was held, and a fibrous tumor, including both the womb and ovaries, was removed, weighing over forty pounds. Dr. John W. Jackson performed the operation, assisted by Drs. Acheson and Carson, of St. Louis.—*Daniel's Texas Med. Jour., April*, 1887.

Tait's Operation—Recovery.

Dr. B. F. Kingsley, San Antonio, Texas, reports the case of a woman, aged 24 years, who had had two miscarriages. She was considerably emaciated, suffered from chronic constipation, and had a history of general pelvic inflammation, with three years, continuous but unavailing treatment. With Dr. Cupples in consultation, the diagnosis of the sister to the writer, Josephine Kingsley, M. D., was confirmed, and her opinion that an operation was the only means of relief was endorsed. The operation was performed March 13—Drs. Cupples, Watts, Barnitz, Johns, Tyler, and J. Kingsley assisting. A three-inch incision was made, and the peritoneal cavity entered—firm adhesions were found everywhere. The left ovary was imbedded in a cyst the size of a large hen's egg. The tube was ligated close to the uterus and removed. The right ovary and tube were more adherent; and rather than break up the adhesions the ovary alone was removed, and was found to contain two pus cavities, one of which was filled with bloody, the other with laudable pus. The only antiseptic precautions were a careful prepation of the sponges and boiled water, reduced to normal temperature. Chloroform vomiting continued for five days. At the time of writing (April 7th) the patient was making rapid progress towards a happy recovery.—*Daniel's Texas Med. Jour., April*, 1887.

Compound Comminuted Fracture of the Frontal Bone with Loss of Brain Substance—Recovery.

Dr. R. C. Nettles, Martin, Texas, reports (*Daniel's Texas Medical Journal*, April, 1887) the case of Bennie Pierson, a deaf mute, aged about 6 years, who was kicked in the forehead by a mule, causing compound comminuted fracture of the frontal bone. The boy was borne to the house somewhat stunned though conscions. Dr. J. C. Daniel saw him in less than an hour. He found a gaping wound filled with clotted blood, entangling some brain substance. Recognizing the gravity of the case, Dr. Daniel summoned surgical assistance. When the writer arrived he found Dr. Whatly present with Dr. Daniel. Some slight muscular

twitchings were quieted by one-sixth grain dose of morphia. The patient was entirely conscious. The wound, which was situated about three-quarters of an inch above the eyebrow, was crescentic in shape, two inches long, and was filled with clotted blood aud brain substance. The frontal bone was fractured, the lower edge of which was driven backwards, requiring trephining of the sound bone for elevation, but was eventually removed entirely, as it was held in position by an attachment of dura mater, insufficient for its nutrition. A small laceration of the membranes was found in the left angle of the wound. A small crust of bone was was made smooth with the forceps, a drainage tube was laid in the wound with its ends emerging at the angles, and the scalp adjusted with silk interrupted sutures. The operation was done antiseptically, and antiseptic dressings were used. The piece of bone removed was two inches long and one inch wide, and had across its centre the markings of the frontal suture. The patient progressed without any bad symptoms, and is now (March 31st) quite well.

Two Cases of Curious Sequellæ of Rheumatism.

Dr. Thomas C. Osborne, of Cleburne, Texas, after some general remarks on the etiology and pathology of rheumatism (*Daniel's Texas Medical Journal*, April, 1887), reports two curious, rare, and interesting cases of sequellæ in that disease.—*Case I.* Mr. Abbott, aged 58 years, in response to the Doctor's inquiry as to why he kept his head covered with a woolen shawl, stated that it was to protect his head against the violence of *shocks* which heavy thunder, or other loud noises, produced upon his brain, as, when he was not so protected, he would be *stunned* as from a blow on the head, and gave the following history as to the cause of this strange phenomenon: At the age of 25 years he suffered acutely with an attack of synovial arthritis in the right knee joint, which suddenly ceased paining him, and almost instantly a violent pain occurred in the bony tissue of his head, near the intersection of the sagital and lambdovidal sutures, and for the next five days his suffering was intense. The seat of the suffering was circumscribed, and did not disturb the functions of the brain. There was swelling of the part, intense tenderness, with fever as high as when the knee was affected. At the end of the fifth day the pain in the head suddenly ceased, and, in the meantime, the swelling had subsided in the knee joint, all of which was immediately followed by an insatiable thirst, requiring large and frequent draughts of water for

alleviation. An hour later the kidneys became extraordinarily active, the quantity of urine passed equalling the amount of water consumed. This condition of things lasted till his death, nearly fifty years. In the course of two months from the date of the thirst, there appeared at the spot in the cranium where the pain had been, a small, soft spot, which continued enlarging in every direction, until at the time the Doctor saw him all the parietalia, the os occipitis as far down as the protuberance, and the os frontis on a line with the supercilliary ridge, were totally absorbed. Mr. Abbott drank, in the course of every twenty-four hours, three gallons of water, an equivalent amount of urine being passed in the same length of time. *Case II.*—Negro, aged 36 years, who had been for 20 years prone and stiff and straight on his bed with anchylosis of every joint, the result of an attack of inflammatory rheumatism, occurring at the age of 16 years. The negro was quite helpless and as rigid as a log, without the slightest motion at any joint, except at the maxillary articulations, and a slight lateral movement of the right wrist-joint. The motion of the lower jaw was unimpaired. The movements of the heart were normal, but the chest was as fixed as an iron box, intellect clear, memory splendid, appetite good, and excretory organs in good condition, but the skin, which was ashy and harsh, was covered with nodosities, varying in size from a buckshot to that of a medium orange. The muscles were shrunken and hard, and there was no softness found, except on the abdomen and face, at which points alone he perspired. The genital organs had escaped any part in the infliction, and were free from venereal infection. The Doctor lost sight of the man, and is unable to say how long he lived.

Remittent Fever—Its Prompt Arrest and Effective Treatment,

Is the title of a serial article by Dr. John L. Jones, New Orleans, La. We have read with interest that portion already published (*Atlanta Medical and Surgical Journal*, April, 1887), and are looking forward to other good suggestions which are to follow.

How to Collect Medical Bills.

Dr. J. R. Harwell, Nashville, Tenn., *in Nashville Journal of Medicine and Surgery* (April, 1887), advocates thorough organization of the profession and reporting delinquents. We may regret the impracticability of putting into effect some of his suggestions, whereby our losses might be considerably less.

Urethral Stricture.

The following question is asked by Dr. B. H. Brodnox (*Miss. Val. Med. Monthly*, April, 1887), prompted by the result of his treatment of an urethral stricture of several years standing. He had worked faithfully for a month or more, at which time he could introduce a metallic No. 10 American gauge, when he had to stop, as the physician who was to assist him in using the urethratome objected to its being done at this stage, and the patient objected to further pain and enlargement. What is the use of all this tugging and stretching when it would be just as easy to open the urethra half an inch forward of the stricture, cut the stricture out, or enucleate it, insert a catheter and allow the parts to heal, drainage being established?

Bowel Obstruction from Retroflected Uterus—Relieved.

Dr. B. P. Wilson, Reddick, Fla., writes (*Miss. Valley Med. Monthly*, April, 1887) that on December 1st he was called to a woman 49 years old, large and muscular, whose previous health had been good. He found her in a state of complete prostration, pulse 135, temperature 105°, and complaining of intense bearing down pains, with constant efforts at defecation. Obstinate constipation was present with stercoraceous vomiting, which was abundant; the abdomen was but little tympanitic, and tender only in the pelvic region. Very little of an enema of soapsuds could be made to enter the bowel. An examination, per vaginum and per rectum, revealed a firmly impacted, enlarged and retroflected uterus, low down in the pelvis and completely obliterating the rectal canal. The obstruction, with all accompanying symptoms, was relieved by partial restoration of the misplaced uterus, which was accomplished by firm and continued pressure against the uterus through the rectum, the woman having been placed in the genu-pectoral position. Dr. Wilson wants to know whether the stercoraceous vomiting was produced by pressure of the uterus against the bowels, or was it due to reflex disturbances?

A Doctor's Rough Experience with the Law.

We read with interest an article under this heading (*Daniel's Texas Medical Journal*, April, 1887), by Dr. R. G. Williams, of Whitney, Texas, in which the writer details in a very amusing style two instances of enforced obedience to legal summons without compensation. We can sympathize, for we, too, are sometimes forced to lend our labors to the law.

Violent and Dangerous Hæmorrhage—Recovery.

On February 26, Dr. L. H. Davis, of Harrisburg, Ark., was called to consult with Dr. Dayton, of Bay Village, in the case of Mrs. C., aged 30, who had been seized twelve hours previously with uterine hæmorrhage, which was soon followed by hæmorrhage from all the mucous surfaces, viz: mouth, nose, lungs, kidneys, and later the skin, and the patient bordered on collapse. Iron and ergot had failed to accomplish good results. Dr. Davis immediately tamponed the vagina and ordered a blister 8×8 to be placed over the liver and spleen which were enlarged and tender. This with iron, quinine, ergot, digitalis, egg-nog, and milk *ad libitum*, composed the treatment under which recovery took place.—*Miss. Valley Med. Monthly*, *April*, 1887.

Progress In Obstetrics.

Dr. W. H. Taylor, of Cincinnati, Ohio, Professor of Obstetrics, Miami Medical College, in a paper read before the Cincinnati Medical Society, says that Weiss reports favorable results from *Porro's operation.* Leopold reports five cases of *Sanger's modification*, and three of Porro's—all successful. They were for contracted pelvis and carcinoma. Skutch reports one unsuccessful case, and recommends puncture of the intestines for the relief of tympanitis not the result of peritonitis. Crede reports two more operations by Sanger's method, aggregating six successful cases by him. Sanger believes that gonorrhœal infection is often the predisposing *cause of puerperal diseases.* The author gives good general rules for the observance of *antiseptic measures*—laying stress on those precautions to be observed by the accoucheur. As a means of disinfecting the hands and destroying the micro-organisms, he prefers 1–1000 solution of corrosive sublimate. In speaking of the *anæsthesia during labor*, Dr. Taylor refers to the paper of Dr. Fordyce Barker, controverting the belief that anæsthesia increases the liability to post partum hæmorrhage; also mentions eighteen cases in which application of four per cent. solution of cocaine to the upper part of the vagina and cervix during dilatation was followed by good results.—*Nashville Journal Med. and Surg.*, *April,* 1887.

The Causes of the Great Infant Mortality in Norseland, with Sanitary and Preventive Suggestions, is the subject which has been running through several numbers of the *Southwestern Medical Gazette.* Dr. Eklund, of Stockholm, Sweden, concluds the paper in the April number.

Double Ovariotomy to Prevent Growth of Uterine Fibroid—Successful—Return of Menses.

Dr. J. G. Earnest, of Atlanta, Ga., performed laparotomy on an unmarried subject, aged 34, with the view of preventing further development of a fibroid, and for the relief of symptoms accompanying such a trouble, which were in this case exaggerated. The tumor was attached by a broad base, apparently in three sections, filling up the pelvis, and firmly fixing the uterus to the floor of the pelvic cavity. The operation was performed January 14, 1887—Drs. N. R. Harris and C. C. Greene assisting. The right ovary was first removed. The left one, after careful search, was found imbedded in a thin-walled cyst, which contained a blood clot and mucous fluid, all of which were removed. The usual antiseptic precautions were observed, and the incision was closed with silver wire, in the usual manner. The patient menstruated five days after the operation; is free from pain, gaining flesh, and much improved in every respect.—*South. Med. Record*, April, 1887.

Action of Antipyrin.

Dr. H. E. Straud, of Colorado, in the *Southern Medical Record*, April, 1887, makes mention of two cases in which the merits of the drug were thoroughly tested with the happiest results. The first was a case of metritis and cellulitis, with septic poisoning consequent upon miscarriage; the other case was one of rheumatic fever. In both instances, the high temperature was lowered and kept under control by the exclusive use of antipyrin. From its use, in these and a few other cases, the Doctor makes the following deductions: 1st. Antipyrin is the most effectual antipyretic we have; 2d. Its use is almost devoid of danger; 3d. It has no visible effect on the head, stomach, bowels, or kidneys; 4th. It reduces fever by checking the processes of oxydation; 5th. It neither removes the cause nor shortens the course of continued fever; but by preventing the hyperpyrexia, the acute fatty and granular cardiac degenerations will not occur, and the nerve centres are saved shock, thereby favoring the action of other remedies and recovery.

Dr. W. Cheatham, of Louisville, Ky., has a paper in the *South Western Medical Gazette*, April, 1887, with the title "*Adenoid Vegetations at the Vault of the Pharynx—The Third or Pharyngeal Tonsil—An Interesting Case of Nasal Reflex—A Case of Exaphthalmos with Locomotor Ataxia.*"

Is the Cholera Coming?

Dr. J. Berrien Lindsley, of Nashville, Tenn., gives a most admirable resumé (*South. Pract'r*, April, 1887), from a practical standpoint, of the progress of cholera since 1883, and from his knowledge of the course pursued by the disease in its travels of the past, the length of time it usually takes to reach our continent, and the rapidity with which it is now nearing our borders, he concludes that but a short time can elapse before we will again have to grapple with this monster foe, and exhorts the utmost vigilance at the hands of the safeguards of our nation—the State Boards of Health—in the observance of the strictest sanitary measures. In the carrying out of such laws we have our protecting shield; and with our increased knowledge of the pathology of this terrible disease we may arm ourselves with the proper remedies, and hope to win.

Hydrogen Peroxide for Suppurative Eye, Ear and Throat Diseases.

Dr. J. Morrison Ray, of Louisville, Ky., sums up a brief article on this subject in the April number, 1887, of the *Southwestern Medical Gazette* with the following conclusions:

1st. Owing to the strong power possessed by the peroxide of hydrogen as a pus-destroying agent, it is invaluable in the treatment of purulent accumulations, especially when situated in cavities, where the ordinary methods for their removal are insufficient.

2d. In purulent inflammation of the conjunctiva as an adjuvant to astringent solutions it will be found of service.

3d. In acute purulent inflammations of the middle ear, it will, unassisted, cut short the discharge in from three to ten days.

4th. In chronic suppuration of the middle ear, uncomplicated by necrosis, as a preliminary cleansant to the boric acid treatment, it aids materially the therapeutic power of this method.

5th. It hastens rapidly the healing of abscesses connected with or due to necrosed bone, as shown by its use in mastoid disease.

6th. As a spray in cases of atrophic nasal catarrh, with ozena, it softens up and removes the incrustations more rapidly than any agent with which I am acquainted, and markedly lessens the foul breath.

7th. Its therapeutic power, when administered internally as a carrier of oxygen to the circulation, or as stimulant to the digestive processes, is still *sub judice*.

Handle with Care—The Use of Blisters.

Dr. Edmund Goldmann, Galveston, Texas, in an article on the uses and abuses of blisters (*Texas Cour. Rec. Med.*, April, 1887) reports three cases in which the use of this remedy, so potent for good in the hands of the careful practitioner, was followed by the most serious, and in one of the three cases, by fatal results. The *first case* was that of a child, to whose chest a large blister had been applied during an attack of bronchitis, which had begun as a complication of measles. The consequence was not only a failure to ameliorate the bronchial affection, but a deep inflammation of the skin, which assumed a diphtheritic character which baffled treatment, and eventuated in death. To the *second case*—the Doctor was called in consultation to a gentleman, who, in the morning, after having partaken of a hearty supper late the night before, was suffering from violent headache, fever, vomiting, etc. Dr. Goldmann found, upon examination, that four blisters had been applied—one to the right hypochondrium, and one to the calf of each leg. Respiration was normal, and the heart was without defect, but working with some effort, and his mental faculties unimpaired. The principal trouble had been the severe headache, and obstinate vomiting of mucous, and laterly a little blood; suppression of the urine had also existed for eighteen hours before death. The diagnosis of the physicians had been *icterus gravis*. The Doctor is of the opinion that the patient died of *parenchymatous nephritis* and consequent uræmia, and that the disease at the outset was simply an acute attack of gastroduodenitis. He believes that without the large and numerous blisters the patient would have had a much better chance for recovery. The *third case* was one of tenesmus of the bladder, the result of the application of a blister during an attack of dysentery. Micturition was intensely painful and unceasing; the matter passed consisted of a mucous liquid tinged with blood, without the odor of urine, and coagulated on the addition of nitric acid. Remedies were applied with the view of counteracting the effects of the blister, to which the Doctor attributed the trouble, and relief soon followed.

Oleum Piper Niger *vs.* Cinchona Dermatitis and Urticaria.

Dr. D. S. Williams, of Texarkana, Ark., reports (*Texas Cour. Record Med.*, April, 1887) three cases in which the urticaria, that usually followed the administration of quinine, due to idiosyncrasies in the patient, was prevented by combining with the quinine oleum piper niger.

Gunshot Wound of Stomach—Complicated with Mania a Potu —Recovery.

Dr. Isaac A. M'Carty, Dallas, Texas, was summoned to John H., aged 32, who ten minutes previously had been shot in the stomach. Two openings were found in the abdominal cavity, one four-and-a-half inches above the umbilicus, and a half an inch to the right of the median line; the other at the junction of the seventh rib with the sternum. The wounded man was considerably intoxicated, but was suffering a great deal of pain, and his pulse was weak and rapid; surface was cool, and the stomach nauseated. But little information was gained by probing. A quarter grain of morphia, with one-seventy-fifth of a grain of atropia, was given hypodermatically, and the patient was removed to the city hospital. Hypodermics of morphia, with attention to general conditions, constituted the treatment, until October 30th, five days after the shooting occurred, when it was evident that the patient had mania a potu—when milk-toddy, and chloral in twenty-grain doses, were added to the treatment. Under this treatment the conditions remained favorable until November 4th, when the temperature rose to 102¾, pulse 108, and tympanitis, septicæmia was suspected, and two twenty-grain doses of antipyrin were given two hours apart, which reduced the temperature to normal. Quinine was then given from every two to four hours. The patient then began to improve rapidly. On November 23d, Dr. Carter and Dr. M'Carty cut one ball out of his back, a half an inch to the right of the junction of the last dorsal and first lumbar vertebræ; the other ball could not be found. On November 28th, the patient went home entirely well. During his whole illness he was extremely nauseated, and at times vomited a good deal of blood.—*Texas Cour. Rec. Med.*, April, 1887.

Hydrocephalus of a Twin Child in Utero—Craniotomy.

J. McF. Gaston, Atlanta, Ga., was called in consultation with Drs. Luther Smith and W. B. Parks on March 5th, 1887, in a case of labor, which, upon examination, presented the following features: After delivery of a child there remained a much greater enlargement of the abdomen than would result from the retained placenta. After some delay and careful examination the Doctor diagnosed hydrocephalic development, and with the concurrence of his colleagues performed craniotomy. The patient has progressed favorably since without the occurrence of anything unusual for the parturient state.—*South Med. Record, April*, 1887.

Diphtheria.

Dr. P. Frank, in a paper read before the Yamhill County (Oregon) Medical Association, after giving the early history of diphtheria, and discussing at some length its pathology, and its relations to certain vegetable organisms, details minutely the symptoms of the disease, and lays down a full line of treatment, from which we make the following extracts. The local treatment, though considered by some practitioners essential, is of secondary importance. The efforts to remove patches of exudation by force is to be deprecated. The sick room must be thoroughly cleansed and disinfected. If the case is seen early, relief may be obtained by the inhalation of acid vapor. As local applications, the author recommends the following remedies as bases of prescriptions, to be used either as a paste, spray, or by inhalation: the atonizing spray of sulphurous acid; painting the surface with tincture of the perchloride of iron, diluted with seven parts of sweetened water, or solution of permanganate of potash; applications of equal parts of carbolic acid and glycerine; muriatic acid and honey, equal parts; pure lemon juice; inhalation of steam from lime water, and some other remedies of minor importance. As general constitutional treatment, the writer believes that if the case is seen early, the following prescription, as an emetic, will be of advantage:

℞. Ipecacuanhæ pulv.....
Ammon, carb.....āā ℈ j
Tinct. lavender comp..... ʒ j
Aquæ..... ℥ ij
M. S.: Take at one draught.

To be followed by some alkaline drink, as—

℞. Potass. tartrates..... ℥ i
Olei limonis.....minims iv
Sacchar. albæ..... ℥ ij
Aquæ bullientis..... ⊙ ij
M. S.: To be used when cold as a common drink.

The remainder of the constitutional treatment given by the writer consists of remedies which are either tonics or stimulants, with preference for iron, quinine and alcohol, with generous and stimulating diet. (*South West. Gazette*, April, 1887.)

Carbuncle Cured by Injection of Carbolic and Salicylic Acids.

Dr. C. H. Wilson, of Galveston, Texas (*Texas Cour. Record Med.*, April, 1887), strongly recommends carbolic acid for

carbuncle. He reports a case in which the diseased process extended from the inferior occipital ridge to the fifth cervical vertebra, and from ear to ear, and had existed for fourteen days, with great impairment of general health. A wash was prepared composed of carbolic and salicylic acids, borax, glycerine rectified spirits, sassafras oil, and water. [The proportions in the *Courier Record* are so evidently misprinted that we do not attempt to state the proportions of these ingredients.] A syringeful was injected through some of the most prominent sinuses and out, in the direction of the most indurated portions of the carbuncle; some of the diluted solution was injected in the centre of the diseased tissues. This, with the external administration of quinine and iron, was followed by complete cure.

The Address to the Graduates of 1886–87,

By Dr. Alex. Erskine, Professor of Obstetrics and Diseases of Children, Memphis Hospital Medical College (*Miss. Valley Medical Monthly*, April, 1887), is full of suggestions and good advice which old practitioners may well accept and follow. Every utterance bears evidence of the profoundest thought, and the sentiments and tender emotions expressed could only be experienced by one of noble soul, whose heart beats in tender sympathy for suffering mankind.

Graduating Valedictory.

In the *Atlanta Medical and Surgical Journal*, April, 1887, we find the address to the graduating class of the Atlanta Medical College, by Henry Clay Morrison, D. D. It was e - quent and pointed, and filled with beautiful illustrations. In it the nobleness of our profession is pictured in glowing terms, and the opportunities for exalting ourselves as men and the requirements and attainments necessary to meet such opportunities are clearly defined. The hardships we undergo were as graphically pictured, and we doubt not that his hearers were wiser and better men for the hearing.

Medico-Legal Questions.

When can a Physician be Compelled to Testify Professionally. The Civil Liability of Physicians and Surgeons for Negligence. Professional Secrets: Their Preservation and Punishment for Disclosure. The above consititute the subjects of an instructive and interesting article from a medico-legal standpoint, by J. J. Abrams, Esq., of the Savannah, Ga., bar, in the *Atlanta Medical and Surgical Journal*, April, 1887.

Tribulations of a Medical Student.—We read with much interest the article by "Quigly" (*South. Pract'r*, April, 1887), in which the writer details in a most amusing style his first experience in midwifery. Similar emotions were recalled to memory, our experiences differing but little from his, save in the fact that we were unable to possess a forty-five dollar broad-cloth coat, and that we preserved with religious care the homespun we wore. Couldn't spoil our Sunday coats.

Hysteria.

Dr. W. M. Powell, of Albany, Texas, reports "A Case of Hysteria in a Young Lady," in *Daniel's Medical Journal*, March, 1887, that shows no special feature of interest.

Editorial.

Medical Examining Board of Virginia.

The official report of the recent proceedings of this Board, which we publish in this issue, shows that the questions asked in examination were practical and for the most part such as should be answered correctly by any practitioner. If to the older practitioner the chemistry questions seem to be unduly hard, it should be remembered that when he graduated he was supposed to be fresh from the laboratory, and familiar with details he has now forgotten. But if the questions are really severe tests of one's chemical knowledge, we will state that the markings by the Chemical Section of the Board were extremely liberal. If there should have been no ratings on Chemistry, then this study should be knocked out of the curriculum of the colleges; but we do not suppose any one will deny the importance of some knowledge of chemistry in medicine.

In regard to other departments, a number of such answers as these were given: "The duodenum empties itself into the ilium;" in dengue, "the fever does not come on till three days after the bones break;" "iodine is sometimes dug up out of the ground in lumps as big as your fist;" "the renal artery enters into the formation of the portal circulation;" "atheroma is a cystic tumor," etc, etc. And yet each of these and many like answers were given by

fresh graduates from Colleges that claim a standard of requirements of from 75 to 80 per cent.

The Virginia Board is doing an immense deal of good to the profession at large. It is stimulating the colleges up to a proper sense of their responsibility, and it is giving to the profession and to the communities a class of educated doctors which they have not generally had since the war. We hope to see the good work begun and continued in Virginia extend to other States. In years gone by, Virginia has been considered "the leader of States." We trust that in this matter of elevation and maintenance of the standard of medical education it will assume this position.

A Successor Desired.

A physician, wishing to retire because of ill-health, and possessing a competence, will relinquish a very large and lucrative practice to the "right man" purchasing his property at its value. This property has been the home and office of well known surgeons and physicians for nearly fifty years. The present owner having occupied it for more than twenty years, has controlled a large and lucrative practice. This is a rare opportunity to acquire an established business of the best quality, and a home in a beautiful village in Western Maryland. Terms easy to the proper person. Address SURGEON AND PHYSICIAN, care of *Virginia Medical Monthly*, Richmond, Va.

Wyeth's Text-Book on Surgery.

We take pleasure in correcting an error in the notice of this excellent book, which occurred in our April number, wherein it is said that "Intubation of the larynx is not described." This operation *is* described on pages 451–2, and the description is practically that of Dr. O'Dwyer himself. In the index, instead of coming under the now technical term "Intubation," it is referred to under the word Larynx. We are glad to learn that a second edition of this work has already been demanded.

North Carolina Medical Society.

We regret that our Special Reporter did not furnish all the "copy" in time for publication in this journal. The late session (reported in part) was an excellent one. That excellent journal under any circumstances—the *North Carolina Medical Journal*—has been made doubly valuable to the profession by being made the official organ hereafter of the

State Society. The proposition for a Tri-State Society—presented by Dr. White, of Richmond, Va., as one of the Committee from the Virginia Society to inquire into the matter—did not meet with favor. The Medical Examining Board did good service to the profession. The late President, Dr. H. T Bahnson, of Salem, presided with an ability that is in keeping with his deserved eminence with the profession. Fayetteville is the place selected for the meeting during *May*, 1888.

Honors Conferred on Subscribers.

It seems that the *Virginia Medical Monthly* is exceptionally favored in having on its subscription list men who attain eminent positions in the profession. *Dr. H. T. Bahnson* has just served his term as President of the North Carolina Medical Society; *Dr. E. H. Sholl*, of Birmingham, was chosen President of the Alabama Medical Association during its late session; and during the meeting (just adjourned) of the Louisiana State Medical Society, *Dr. Joseph Jones*, of New Orleans, was elected President for the current year.

Analyses, Selections, etc.—The New Feature in Journalism.

In our April issue, we commenced, as a new feature, the presentation of analyses of every original article appearing in every regular medical monthly journal published South and Southwest of Virginia, including those of Kentucky and Tennessee. This feature "has taken" wonderfully well with the profession wherever introduced in the country. Curiously, it is specially popular with the Northern and Western *city* doctors, and with the Southern *country* doctors.

In this May issue, several journals are not represented that are entitled to representation, simply because the April number of these journals have not reached us until just as we are going to press Whatever may be in these journals will be presented by analyses in our June number.

Dr. Fordyce Barker,

Of New York has left on a flying trip for Europe—just for the voyage out and back. He needed the recreation. He will be at home again about the last week in May.

Book Notices

Have been crowded out of this issue; but this department will be full in the June number.

VIRGINIA
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RICHMOND, JUNE, 1887.

Original Communications.

Art. I.—Remarks on Certain Mutilations and Artificial Deformities, Including Trepanning, Foot Deformities, etc.*

By M. A. RUST, M. D., Richmond, Va.

In the second paper on "Heredity," which I am now preparing, I maintain that mutilations and artificial deformities are never transmitted by heredity. In proof thereof, I refer to sundry mutilations, which, since time immemorial, have been and are still practiced, without ever re-appearing in the offspring. To expatiate in that paper on matters quoted only as examples, would not be in consonance with the conciseness with which all its other topics are treated. Nevertheless, the notes which I have gathered may, perhaps, interest some of you. Accordingly I have made them the subject of these few pages—as a diversion from our graver discussions.

It might be insinuated that a great part of what I am about to say, rather concerns the shoemaker than the Doctor. I would rejoin, that nothing having connection with human existence can be too little or too big to engage the thought of the physician.

* Read before the Richmond Medical and Surgical Society, April 26th, 1887.

There is, and has been at all times, in all regions of the earth, a strange unaccountable propensity in mankind to deliberately deform or mutilate this or that part of the body. It is not a propensity inherent in individual human nature; on the contrary, the act is exceedingly repugnant to it, and no sane individual would commit it. The mutilations in question are, at all times, prompted by a subtle force from without—the *social force*, by which the individual is permeated, actuated, and unconsciously constrained to adjust his acts to social demands. The motive may be designated as belief, creed, fashion, clannish or tribal custom, sacred custom, social rites, etc. It is the outcome of the same social force—the social medium, by which the civilized as well as the savage is surrounded.

The so-called savages, all of whom, however, live in some kind of social organization, offer the greatest variety of mutilations, the same kind of mutilation being often practiced, with slight variations, by different races in different parts of the globe. The septum of the *nose* is perforated and a thick bone forced through the aperture; a slit is made in the *underlip* and a block of wood inserted; the *front teeth* are knocked out, or chipped and filed into various shapes, or they are perforated and studded with chips of brass; holes are bored through folds of *skin* on various parts of the body and plugs or rings inserted.† (Of this custom the perforation of the *lobe of the ear* still survives with us.) *Babies' skulls* are squeezed and strapped, so as to give the head an oblong—sometimes a flattened—shape. This is one of the most ancient and wide-spread mutilations. It is not only in fashion with Indians and other savages, but has been practiced even by civilized people—especially in some parts of France—till recent times.

The most curious fashion of cranial deformation is *trepanning*. Trepanned skulls have been found in caves and dolmens of France, and diligently studied and described by the lamented Dr. Paul Brocca, of Paris. These skulls

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For details see Darwin's Descent of Man, Vol. II, chapters 19 and 20. Also a whole library of travels from Captain Cook down to Livingstone and Schweinefurth.

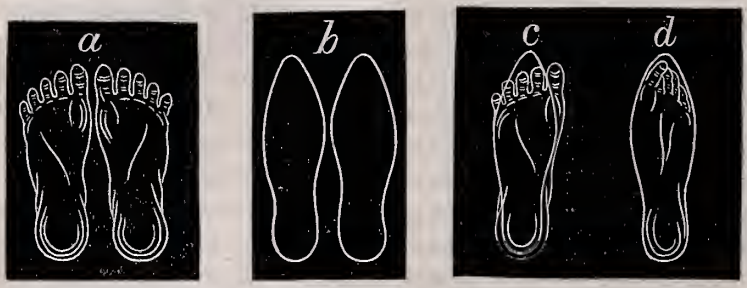
belong to the earlier portion of the "new stone age," and were trephined during life-time, as is shown by the formation of the cicatrix. Oddity is added to oddity, by Brocca's discovery, that a number of the trephined and healed skulls were, after death, again subjected to the same operation, a number of small disks being cut from them in such a way that each disk contained a portion of the cicatrized edge formed by the original trepanning. Great numbers of those disks were found in proximity to the skulls. Flint stones formed the armamentarium of those early surgeons.

Passing to more civilized nations, we will mention the well-known barbarous custom prevailing, since the most ancient times, in the Celestial Empire. By a wearisome and painful procedure, resulting in the arrest of growth and alteration of the relative position of the metatarsal bones, phalanges and surrounding tissue, the Chinese forces his young daughter's *feet* to assume the shape of a quadruped's hoof.

A similar deformation of the foot, only minor in degree and variable in results, is practiced all over civilized Christendom, by dint of the fashion of wearing pointed shoes, which make a mere show of fitting the foot; ostensibly, the shoe is made for the foot; actually, by hook or by crook, the foot has to conform to the shoe.

There is the greatest discrepancy between the conventional last upon which the shoe is shaped and the normal foot. The shoe last tapers, symmetrically on both sides, to the point of the toes, whereas the foot presents, on its inner side, a straight (slightly waved) line, running parallel with the long axis of the foot, from the inner side of the heel to the centre of the great toe. Both *normal* feet, when placed together, touch each other at the heel and at the point of the great toe, whilst a pair of fashionable shoes, when placed together, leave between them at the toes a triangular V like space, with the wide opening in front. (See illustrations.) Looking at such a shoe, it seems as if it were contrived to fit a foot of which the great toe had been beveled off. Indeed, the human foot with its great toe, were it not so exquisitely elastic, could never be squeezed into this narrow space, and

the feat is only accomplished by dint of forcing the great toe out of its normal position, twisting and turning it outwards, almost at a right angle to the foot, and cramming the smaller



toes under and above each other like a crowd of market chickens cribbed into a narrow coop. Consequently, the whole arch of the foot is pressed out of shape and loses its delicate elasticity; the play of the muscles is impaired, the circulation obstructed, the toes stiffened, dislocated and crippled, and all that array of torturing evils—corns, articular inflammation, ulcerations, bunions, in-grown nails, etc.—follow close in the wake.

Of these evils, the two last named come most frequently under the physician's care. Obviously the *in-grown nail* is the result of shoe pressure. The shoe presses the great toe against the smaller ones, but those, in their turn, are likewise pressed, from the opposite side of the shoe, towards the great toe and bruise and squeeze the fleshy part of its second phalanx (facing the middle toe) against and over the edge of the nail. To this must be added the downward pressure from the top of the shoe, contorting and twisting the nail and bending it towards the smaller toes. The in-grown nail always appears on the side where the great toe faces the middle one; the fleshy parts are here wedged in, as if squeezed between the jaws of a vice.

The *bunion*, a chronic inflammation, with more or less displacement of the articulation formed by the base of the first

(*a*) Two normal feet placed together.
(*b*) A pair of fashionable shoes put together.
(*c*) Relation of shoe to foot.
(*d*) The five toes caged in their coop.

phalanx of the pollex pedis and the head of the first metatarsal bone, is the result of a similar squeezing process. The narrow shoe presses against the great toe, pushing it outward against the smaller toes; and if, as usual, the shoe is rather short, the second phalanx of the pollex is curved down, whilst the first phalanx is thrust, by the pressure from the top of the shoe, against the metatarsal joint, causing the head of the shaft to swerve towards the inner edge of the foot and towards the sole. The dislocation appears in the shape of a protuberance corresponding to the site of the phalango-metatarsal articulation. By the constant bruising of the leather, the bursa mucosa is formed, as in the housemaid's knee; inflammation, ulceration, perverted growth of bone, and periostitis follow. The bunion constitutes an exceedingly vulnerable spot on the foot; this ill-used and ill-nourished tissue is a predilected seat for chilblains, which, on this place, form at a temperature considerably above the freezing point.

No treatment of either of these evils (in-grown nail or bunion) can be of avail, unless we procure a foot-cover which will allow the great toe a position approaching as nearly as possible to the normal one; that is to say, the phalanx of the great toe normally follows the direction of the first metatarsal shaft, running in a straight line and pointing outwards, like the thumb of the hand—though, now-a-days, we rarely meet with a normal foot.

The hackneyed remedy of the shoemaker, of nailing to the last on the spot corresponding to the bunion, thick, rounded pieces of sole leather, hereby producing, in the leather of the shoe, a hollow to receive the bunion, may, in some instances, afford temporary relief; but if the old, vicious form of the shoe is retained, the pressure from above the bunion will continue, and nothing will be gained but more space for the lateral deviation of the joint. In many instances I have found, after a lapse of time, an increase of the deformity.

By pressure on the capillaries the narrow shoe impedes circulation and prevents the escape of perspiration. Thousands of cells die every minute on every inch of the surface of our

bodies. Unsuitable as the rest of our garments may be, they allow a partial escape of the exuvia; in the narrow shoe the cell-corpses are retained to decay, hence the odor. The leather of the narrow shoe, if in the least wet, chills the foot, hence the frequent colds. Expansions and contractions of the foot are, in the narrow shoe, reduced almost to zero; consequently hip and knee must do more work in walking—hence the inelegant stamping gait. This gait, moreover, endangers the beauty of the leg. The long tendon in which the three muscles, constituting the calf of the leg unite, is attached to the calcaneum; with the foot encaged in the narrow shoe these muscles are insufficiently exercised, and the calf of the leg is apt to shrink. Given more freedom to the muscles of the foot, the gait would be more secure, more easy and elegant. There would be less slipping and stumbling, fewer sprained ankles, fewer colds, etc.

Likewise would our horse be less apt to stumble were it more rationally shod, or not at all. By the way, I will note that we find in the periodical literature *horse-shoeing* often enough discussed—man shoeing very rarely. This reminds me of the German peasant, who is always much swifter to run for the cattle doctor when his cow—than for the physician, when his wife—is taken sick.

In the military countries of Europe the first outcry against the narrow shoe came from the army. It was the army surgeon, Dr. Ziegler, who first sounded the alarm, when he discovered that in little Switzerland seven hundred recruits had been rejected in one session on account of crippled toes. In this country the military authorities will hardly pay attention to the matter; in happy America the whole male adult population is not compelled to march up once in every year before the recruiting officer and show their toes. It behooves each one of us, in his sphere of action, to enlighten the public.

The great flood of those villainous shoes which cripple the feet of the whole population of the United States, without distinction of color or race, comes from New England. By this time, indeed, the manufacturer ought to know something about the consequences of his doings. There, are,

moreover, plenty of sensible people who scour the stores in search of a shoe more conformable to the human foot. In vain! "I guess it is against the laws of Massachusetts," a facetious salesman once said to me. The manufacturer naturally shrinks from throwing away his entire stock of lasts, etc., and replacing them by new ones; and as long as he finds sale for his wares, he will run on in the old groove. But a day will come, when an elect shoe manufacturer, sitting *post prandum* in unquiet slumber, moaning and groaning with a fit of indigestion, will see himself suddenly surrounded by millions upon millions of ghastly, crippled toes, crippled and maimed by his agency—all pointing reproachfully into his face and asking piteously, "Why persecutest thou me?" and like Saul, after the vision, he will awake a new man, a redeemer of tormented feet—the longed-for *Shoe-Messiah.*

True, people with means, willing to pay double the price, may pass the shoe-store by, and have their shoes made by measurement at the shoemakers; they will be a shade better off, but only a shade. The art of taking the measurement of the foot, if it ever existed, seems to be a lost art. The way the average shoemaker sets about taking a measurement is full of fallacies. The customer sits down, takes off his shoe, raises his foot, and the shoemaker takes the measure *over the stocking.* That the foot, just freed from its fetters is still benumbed, contracted, half paralyzed; that the pressure of the stocking is sufficient to hold the toes squeezed together; that the moment the foot treads firmly on the ground, it will expand; that any measurement taken this way in the morning after rest will be found in the evening, after the foot has been exercised, egregiously too small—all this is not generally taken into account. Some of the more enlightened shoemakers have recently taken up the reasonable plan of placing the foot on a sheet of white paper, and tracing a lead-pencil line around the sole. But even this method, if executed in a slovenly manner, may defeat the end in view.

The customer ought to bare his foot, stand erect, and press the foot, the heel slightly elevated, firmly on a sheet of paper spread on the ground. If, as usual, the toes are crowded

together, perching, riding, or straddling one on the top of the other, they must be brought into their natural relative positions, the great toe slightly in the position of abduction—and, if already too much crippled, a piece of cotton wool should be placed between the first and second toe to keep the latter somewhat abducted. A better plan than the pencil tracing is to dust the bottom of the foot with pulverized chalk, and take the imprint on a sheet of dark paper. The inner side of the foot (corresponding to the great toe) being thicker than the outer side, this thickness, or the distance from the ground to the dorsal surface of the foot, must be measured. A still better plan, though more troublesome, is to take a plaster-cast of the foot, never neglecting to bring the toes previously, as much as possible, into their natural positions.

No shoe, even when it appears to fit, should be worn if it do not comply with the two paramount requirements—viz., the foot, in its entire length and breadth, must rest on the sole inside the seam; and the shoes, if put together, must touch each other at the heels and toes.

It matters little whether the sole be afterwards made square or round at the top, provided such pruning does not curtail space. A shoemaker with artistic taste will speedily find a suitable finish, to which the eye of fashion will accommodate itself.

Few indeed are those who ever set eye on a normal adult human foot; but we cannot imagine that any person, not infatuated, would, even on beholding it for the first time, call it ugly. To get a good look at a normal, undeformed foot, we have to travel to the bare-footed savages. In civilized countries it is only the babe's little foot which presents this model of perfection; and who, with sound sense; would not be struck by its exquisite beauty?

In the great, unparalleled master pieces of Grecian sculpture the artist has likewise found the model of a perfect human foot. Modern scientific criticism has, however, animadverted upon the pretended perfection of the Grecian foot Virchow, the keen observer, in scrutinizing the matter, has come to the conclusion that all the Greek statues, even those of the gods, have deformed feet, and are unfit to convey an idea of the real beauty of an unimpaired human foot.

Now, we may take it as a truism of the widest bearing:—*Whenever a god, otherwise perfect, presents deformed toes, his worshipers have been wearing ill-fitting shoes.*

In the foregoing we have only contemplated the mischievous action of shoes and boots on the form of the foot. We have still a word to say about the structure and function of the human foot.

Few people form a conception of the wonderful mechanism they permit their shoes to cripple; but the student at the dissecting table does. In face of the complex structure before him—the numerous bones, the many layers of muscles, of which especially the phalanges, the flexors, extensors and abductors so closely resemble those of the hand—he will readily accord to the foot a functional aptitude similar to that of the hand. To be sure, the foot has its morphological, anatomical and physiological characters which distinguish it from the hand; nevertheless, we may fitly designate the foot as a *modified hand.* We call our cousin, the ape, a *quadrumane;* but the characters which distinguish the foot from the hand are essentially the same, both in the ape and in man.

We often see our babes oppose their great toe to the second toe, performing the act of grasping. Many bare-footed savage tribes have, as we are told, preserved to this day the faculty of using their feet as prehensile organs. In some lonely parts of the Mediterranean coast, the fishermen, who never wear shoes, use the feet handily in arranging their nets. In some parts of the East Indies the sandals are provided with a projecting peg, thong, or button, fitting in between the first and second toe; the toes grasp this button and slip the sandal on.

All that has ever been seen or heard of, in this regard, is exceeded by a Mr. Unthan, who, a short time ago, was presented by Professor Virchow to the Anthropological Society of Berlin. Mr. U. was born without arms, having only two stumps half the length of the upper arm. He has had a college education. Exercising his feet since boyhood, he became an accomplished penman, a virtuoso on the violin; he rides on horseback, dresses and undresses without assistance, etc.

At the meeting, sitting on a chair, his feet resting on a table, he took up a pack of cards, shuffled and dealt, drew a cigarette from his pocket, lit and smoked it, took out a penknife, opened it, sharpened a lead-pencil, and did some writing as readily and rapidly as any man can with the hand, etc., etc.

What a prodigious work of nature do we strive to destroy with our ill-shapen shoes!

Albeit, seeing this complex anatomical structure of the foot, framed, as it were, after the pattern of the hand, and seeing the use which man makes and has been making of his foot in the last ten or more thousands of years, we must admit that a simpler arrangement would have served the purpose.

However, as this complex structure of the foot is and has been in actual existence; and as an organ only evolves through adaptation to environments, and only develops and grows to the modes in which it is exercised, it follows that a time must have been when the function of the foot had a wider range than it now has,—when all its various bones, joints and muscles were adjusted to different ends, and served different purposes in common with those of the hand.

Penetrating into the dimmest past, we are hardly prepared to find primeval man exercising his hands and feet in playing the violin, rolling cigarettes, or the like. We may ransack our brains as we will, there is no imaginable exercise, concordant with the status of primitive man, apt to arrest our thoughts—except *one*—that is *climbing*. Climbing was the inbred primordial exercise of primitive man. Only by constant climbing could that wonderful mechanism of foot and hand develop and grow, could every part of it be exercised and nursed into completeness of function. High up on the summits of ever verdant trees, far removed from filth and bacteria, free from knowledge and free from sorrows, our speechless ancestors lived their paradisian life, lustily climbing and scrambling from branch to branch, from bough to bough, the live-long day, for uncountable ages. Some inherited residuum of the ancestral climbing nature still crops out among our boys, during their years of indiscretion.

We turn a leaf in the book of eternity, and we find our

ancestors descended from their sylvan paradise. They have left their tails behind, and climbing is no longer their chief occupation. In the course of an infinite past, we meet them as cave-dwellers; all over the globe we lift from the bowels of the earth the relics of their handiwork—the implements which give name to the "*stone age*," "*bronze age*," etc.

Foot function has become restricted to locomotion on firm ground. Brain development has progressed; speech and reason were evolved. Ladder, bow and arrow, rope and edge tools exemplify the ways and means by which a higher order of brain function relieved muscular exertion, and by which man gradually acquired "dominion over everything that moveth upon the earth." He had eaten of the tree of knowledge. Civilizations emerged to be again submerged; and as there is reason to believe that each civilization had its own particular shoe, and no reason to believe that the shoemakers of past civilizations were more thoughtful in regard to foot function than the shoemakers of the present day, it is presumable (also indicated by other signs) that a pernicious influence of the shoe has been more or less at work since the earliest times.

Be this as it may, disuse of certain parts of the foot during an immeasurable time, ill-use of the whole foot during the ages of civilization have as yet not resulted in reducing the bones and muscles of the foot into a state of atrophy and wasting—into a rudimental state. Stunned and crippled as the toes may appear after having been encaged in the shoe, when adequately exercised in early life, they assume their primitive fulness of life and function.

From this fact we can draw an inference what an immense, incalculable time must lapse for an organ to become rudimental and useless by disuse!

Should civilized humanity continue to move on in its narrow and pointed shoes, a time will come—be it ever so remote—when it will find itself without toes, the foot converted into a pointed hoof. The rudimental and useless bones of this foot will be to the anatomist of that remote future a puzzle, as the two useless, shrunken side-bones above the hoof of our one-toed horse have been to us, till Professor Huxley—and especially Professor Marsh, of Yale College,

by his discovery of the many-toed, great great grandfather of our one-toed horse, so happily and convincingly solved the riddle.

All (or nearly all) complex organisms, our own body not excepted, present such rudimental organs which once served —but no longer serve—a purpose. At the sight of them our imaginative power is stimulated to rehabilitate them, in mental conception, in their original buoyancy of life and functional vigor. Thus, whenever I recall the *coccyx*, that bootless little appendage to the *sacrum*, with its four or five shrunken bones, the remnants of a once mighty tail; or the pale slender fibres of the three rudimental auricular muscles, which once gave the external ear movement and expression, a molecular dance is incited in certain groups of my brain cells; and in the dimmest, almost unthinkably remote past I perceive on a mighty limb of a giant tree our hairy progenitor, proudly raising his bushy tail, pricking up, wagging and shaking his ears, to give vent to his deeper emotions.

Likewise, as we have seen a perverted taste find the contracted foot handsomer than the normal one; so does the same vitiated taste find a wasp-like constriction of the waist more elegant than the beautiful wavy lines of the natural female body. Hence the *corset*, with its baneful effects on the organs of the thoracic, abdominal and pelvic cavities.

Ignorance or thoughtlessness lies at the root of many other deformities which appear among civilized mankind. Thus, *e. g.*, scoliosis, or curvature of the spine, is produced by ill-contrived school-desks and benches, myopia and other visual defects by insufficient light in the school room.

It has been found that the elastic garter fastened below the knee tends to impede circulation. An improvement on it appeared in the shape of an elastic band attached to the stocking and running up on the outside of the thigh, to be fastened to the under-jacket or corset. Now, according to the observations of Professor Luecke, of Strassburg, the traction of the India-rubber band draws, by means of the stocking, the leg outward, causing at the same time, in small children, a slight rotation of the knee, resulting in the formation of X-shaped legs.

[*To be continued in the next number.*]

ART. II.—**Bi-Borate of Ammonium in Uric Acid Calculi.** By WM. J. CRITTENDEN, M. D., Unionville, Va.

The treatment of a paroxysm of "renal colic" is sufficiently plain, and need not be here recapitulated. But the *preventive* of these paroxysms is a matter which has puzzled the master minds of the medical profession from time immemorial.

It is almost useless for me to say that without a chemical examination of the urine—the sediment, and particularly the little calculi—the treatment will be a mere matter of guesswork. There are cases of renal colic dependent upon uric acid calculi, recurring several times a day, once in two or three days, once a week, once a month, etc. I find the *bi-borate of ammonium* to be a drug possessing a peculiar influence over the calculi in question.

In patients who have these attacks of renal colic every day, I prescribe twenty-grain doses of ammonium bi-borate every two hours until a free passage of urine takes place; then every four hours until all ill-feeling passes away; then I decrease to fifteen grain doses three times a day before meals in a glass of flaxseed tea, and so continue for several months—discontinuing it for a day or two at a time every two weeks. In cases in which the paroxysms recur once a week, I pursue the same plan of treatment.

Now, if these paroxysms recur once a month, I give fifteen grains before each meal for two or three months at a time. I find it a good plan, when we give it for a length of time, to combine with it *lithiated extract hydrangea* in teaspoonful doses. I will append two cases:

Case I.—Mr. A., age 52, suffered with attacks of renal colic once or twice a month. I gave him—

℞. Bi-borate of ammonium.....ʒj.
Water.....℥j
M. S. Take one tablespoonful before each meal in flaxseed tea.

I continued this line of treatment for two months with perfect relief.

Case II.—Mrs. W., age 43, suffered intensely with renal colic. I procured a sample of her urine and tested it, and

found it contained a number of small uric acid calculi. I gave her of a solution like the above, one tablespoonful every two hours until she was entirely relieved. I then gave her fifteen grains every four hours for a week, followed by the following:

℞. Bi-borate of ammonium.....ʒv.
Lithiated ext. hydrangea.. ....℥iv.
M. S. Take one teaspoonful just before each meal in flaxseed tea.

I continued this line of treatment for two months with gratifying results and perfect relief.

I always find the solution to be best when made fresh.

ART. III.—**The Elastic Ante-Partum Bandage.** By HENRY V. GRAY, M. D., formerly Surgeon of Lee, Alexander Battalion of Artillery, C. S. A., Professor of Anatomy and Physiology, Roanoke College, Va.

"Meddlesome midwifery is bad," said Rudolph Wagner long years ago, the force of which the conservative physician of the present day fully recognizes. In a case of labor, to be constantly pressing and squeezing over the bowels and obstetrically sheathing and unsheathing the hand, is entirely useless, and well calculated to do your patient much harm. Unless you apply equable, continuous, and reasonable pressure, you will invite a spasmodic action of the uterine muscles or a breach in co-ordination, which will retard labor and increase the danger, both to mother and child. Better for the patient that her physician beparalyzed in both arms than such mischievous meddling.

If you will take a peep at the anatomical relations of the uterine muscles, you will more readily appreciate my meaning. But every one will agree that our patient can be assisted, and this ante-partum bandage is just what is needful.

By using it, say from the sixth to the ninth month, you will gain many advantages. If there should be any obliquity of the womb, which is so frequently the cause of shoulder and arm presentations, you will have a good chance to correct them before the time of labor. By its equable pressure there will be much less danger of miscarriage, and the pa-

tient will suffer less with nervousness. Used at or near the time of labor, it will act as a tonic; and should a portion of the waters escape before the regular pains of labor, it will give the necessary pressure. After regular labor pains come on it will prevent recession of the presenting part of the child, causing fixation and bring about more rapid dilitation of the os uteri and delivery. The forceps can be more easily applied, and it will lessen the danger to perineal rupture, as the pressure will be regular and continuous. There will also be less danger to hæmorrhage, fainting or convulsions. After delivery of the child it will cause a natural extrusion of the placenta, without resorting to Crede's or other methods. Should the after-birth (placenta) clear the womb and pass into the vagina, slight traction or elevation of the patient upon a chamber will release it. The elevation of the patient upon a chamber is very necessary to clear the mother of all clots, which is one great cause of blood poison. I can honestly say, that after an experience of upwards of twenty years, with a reasonable share of practice, I have never lost a parturient patient, nor have I ever had to contend with any serious cases of puerperal fever, yet I have never used intra-uterine or vaginal injections, antiseptic or otherwise, which is now so foolishly and, in many instances, detrimentally used by the fashionable physician. Clear the womb and vagina of clots by a suitable bandage applied before labor, and let your patient stool when occasion calls, and all will be well.

The material required for bandage is simply an elastic (open meshed) front piece, and an ordinary cotton cloth band for back, with straps and buckles to tighten or renew when soiled.

ART. IV.—**Theory and Application of Electrolysis.*** By EDWARD McGUIRE, M. D., Richmond, Va.

In presenting this subject I shall briefly mention the different theories and physical principles which are essential to its comprehension, consuming most of our time with the clinical experience of different writers.

* Read before Richmond Medical and Surgical Society, May 10, 1887.

Electro-chemical decomposition of both normal and abnormal tissues has now become an important therapeutic study, although the physio-chemical effect of the current, as in aneurism, nævus, etc., has long been undisputed; still that the current exerts a solvent action upon tissues and ordinary inflammatory deposits is not so well recognized. This, we think, may be due to two causes: first, its advocates are so carried away by their enthusiasm that their reports show a failure of patient and continued observation, a lacking of details and candor which is necessary to warrant their acceptance; and, secondly, because sceptics who have essayed to test it have been still more deficient, for, in addition to the biased state of their minds, they are often lacking in electrical knowledge and skill.

The term *electrolysis* is defined as the process of decomposing a compound body by the continuous galvanic current. It is purely a chemical action. It does not burn like a cautery, but dissolves substances into their constituents in the ratio of their chemical equivalents. In the living tissues, more than this likely occurs; for the disturbances by the current produce some influence on the various tissues, causing alterations in their nutrition, which we can only recognize by functional changes when the electrical treatment is ended.

Up to the present time scientists have not agreed upon a physical basis which will explain the phenomena of electrolysis. Grotthus, a Swede, first proposed a theory in 1805. He supposed that there was a series of decomposition and recombinations throughout the electrolyte; or, in other words, a direct transfer of elementary atoms from one pole to the opposite. For instance, in the decomposition of water, the H, being electro-positive, is attracted by the negative pole, while the O, being electro-negative, passes to the positive pole. Although the chemical action upon pure water by electricity is slight, it can be seen that if both metallic electrodes be placed in boiling water there is an active increase of motion of the fluid and gaseous particles around the poles; and any one who has seen this experiment can realize that its application to the porous tissues of the body

must be followed by a correspondingly great disturbance of the fluids of the human tissues. It is natural, therefore, to conclude that these disturbances must interfere with physiological changes which are essential to proliferation of cells. This theory by the majority of the profession is most generally adopted, though many claim that it is impossible for such changes to take place in living tissues without producing greater evidences—the only visible signs being the gaseous decomposition at the electrodes and the gradual disappearance of the substance which follows the alteration of nutrition produced by the current.

According to the views of Dr. Althaus, in the animal body a double decomposition takes place. The salts of the tissues are split up, the alkalies going to the negative pole and the acids to the positive. The alkaline metals, sodium and potassium, having a great affinity for oxygen, decompose the water in the region of the negative pole—the hydrogen escaping as gas; and caustic soda or potassa thus produced saponifies the tissues, producing a soft and deliquescent eschar, which does not heal with much contraction.

The acids go to the positive electrode, and generally liberate the oxygen also; but the action of the acids will depend somewhat on the character of the electrode used. For instance, if a zinc electrode is used, chloride of zinc is formed, which exerts its own specific action in addition to the oxidizing effect of the liberated oxygen, the resulting eschar in this case being found to be hard and dry, while suppuration is more apt to follow. He moreover thinks that the effect of electrolysis is not limited to the area of cauterization, but extends to the interior of the tissues, as is shown by the reduction of the size of pathological growths, which are out of all proportion to the local effect.

Tripier thinks the electrolyte theory is insufficient to account for the work done in absorption, which he thinks is due to the reaction of the nervous apparatus and to the modification of the circulatory conditions. Thus, from a review of the physical and chemical effects of electrolysis, there are four methods (mentioned by Armory) by which electricity could interfere with interstitial nutrition :

"1st. By producing a true decomposition of the chemical compounds upon whose combination living structures depend. 2d. By interfering with the process of cell segmentation; this would prevent repair and multiplication of cells whose living functions are essential to the growth of tissues. 3d. By promoting a movement of the mass of fluids in the tissues toward the negative pole, thus interfering with constructive metabolism. 4th. By the acid and alkaline reactions at the positive and negative poles respectively, by which a caustic action is effected."

When the therapeutic application of electrolysis is considered, it is most important to select an effective battery. For this purpose one consisting of 15 to 30 ordinary cells is best. Each carbon plate should be coupled to its fellow zinc, in order that a current of high electro-motive force may be obtained. Formerly, in giving an idea of the efficacy or force of a current, the electro-motive force was always stated; now currents are employed according to their *intensity*, which is the amount which is transmitted through a given section in a given time, or, in other words, is that quality of electricity by which it overcomes *resistance*. It is the result of the electro-motive force, and is dependent on it; frequently, however, the two are often confounded. This, as well as the whole application of electricity, depends on the well known physical law of Ohm, which is that the *quantity* equals the electro-motive divided by the *resistance*.

From a glance at the law it can readily be seen that the *intensity* is inversely proportional to the *resistance;* therefore the less the conducting power of the conductor the greater the *resistance* and the less the *intensity*.

In the human body, as it is well known, the *resistance* not only varies in different individuals, but in the same person according to atmospheric conditions or the tissue submitted to the electrode. It can readily be seen that the strength and intensity of the current should be tested at each sitting. To many operators the measurement of the current is considered an important adjunct; some holding they would as soon think of giving a hypodermic of morphia without measuring as to employ electricity without doing the same in regard to it. Others rely more on the feelings of the pa-

tient as a sufficient test of its strength, and hold that we have no means of measuring, as the current is employed according to its intensity, and not quantity. For instance, we may prescribe a dosage of 5 milliamperes in two patients, but on trial it is found that the resistance is different in each; so that in order to obtain the 5 milliamperes 36 Daniel cells were used in one case, while only 12 were used in the other; so while both received the same amount (5 milliamperes), yet one obtained it under an electrical pressure three times as great as the other.

The instruments now in general use for measuring the currents are the galvanometers, when graduated in milliamperes called milliamperemetres, and the voltametre, by which the amount of gaseous decomposition is measured.

In surgery in the past few years electricity has made considerable progress, and is a well recognized treatment in many troublesome affections. Although tested in nearly as many diseases as this branch of our profession possesses, with successes and failures reported by different operators, it will only be necessary to mention those which would deserve future trial from past experience.

Aneurism.—In its application to aneurism electrolysis has not afforded many permanent cures. Its application has been entirely superficial, and the reason for non-success is obvious: the formation of the sac is due primarily to a faulty nutrition in the coats of the vessels, so that the dilatation at one definite period only is remedied, and the primary cause not removed. Besides, most operators use too strong a current, causing a local inflammatory action, with rupture of the sac following. Dr. Bartholow, in his work on *Medical Electricity*, gives a tabulated statement of 89 cases with 32 cures and twelve deaths; since then he has collected 21 additional cases with beneficial results in 9.

Chronic and Indolent Ulcers have been treated with success by this means, each case presenting special indications. If the surface be covered with moist secretions the positive pole is indicated, in that you want the stimulating caustic effect; besides, on account of the cataphoric action of the current, the watery material of the ulcer would pass

towards the negative pole. If the ulcer is dry and hard, the negative pole is indicated; and in both a current of medium intensity is demanded.

The treatment of NÆVUS has been attended with marked success. Local inflammatory action should be avoided; the needle should be withdrawn when the blood is seen to be coagulated and lymph poured out—the color of the nævus then assuming a bluish tint. Sloughing is more apt to follow the positive pole, though the scars resulting from the local action of the current are generally so slight that scarcely any visible blemish remains. If one needle be used, it should be made of platinum, as it is not acted on by the current. It is passed in at the base of the nævus, then moved gently as the tissue is being decomposed, so as to come in contact with the whole swelling; or a half dozen finer needles may be passed into the nævus and kept stationary. No hæmorrhage even follows. I have employed it for the removal of five nævi from the forehead and upper lid in one patient with the most satisfactory results. In the application to one of the tumors I used too strong a current; inflammatory action followed; but the scar resulting was scarcely visible.

Its application to GOITROUS AFFECTIONS is well worthy of attention. Numerous cases of the cystic and vascular type have been reported cured. In the fibrous forms it has not been so signally successful, though many cures are reported; in others, amelioration of symptoms by diminution of the tumor. We must not wonder at the varying success of treatment in these different types of goitre when we remember that the solvent action of the current is proportional to the liquidity of the tissue.

In EXOPHTHALMIC GOITRE we find 63 reported cures by responsible men. Surely this needs no further recommendation for its use in a disease for which we can do so little.

The results obtained in the treatment of the *genito-urinary organs* by electricity are satisfactory; but the most useful is the application of electrolysis to STRICTURE OF THE URETHRA. Indeed, so well established is it in this frequent affection that by many it is thought it will in the future be the adopted treatment of the profession at large. In reviewing a large

number of cases in this country and Europe, universal success is almost always reported. Indeed, so important do I deem this portion of the subject that I feel justified in trespassing upon your kind attention and forbearance long enough to describe its application and advantages.

An ordinary bougie is passed down to the seat of the stricture, and the distance from the meatus is thus measured. It is then found out what size bougie will pass through it. If, say, a No. 3 English, then a No. 5 is chosen and passed down to the point where it is arrested. The electrode is then connected with the *negative pole* of the battery; the circuit is then closed by placing the sponge electrode of the positive pole, previously moistened with water—or, what is better, a saline solution—on the inner side of the thigh, and the circuit gradually increased until the maximum 5 or 6 milliamperes is reached. No force should be used; the electrode is to be gently pressed against the stricture in the normal direction of the urethra, so as to avoid a false passage. The length of time of the operation will depend on the density of the stricture and the intensity of the current. Although as a guide 5 or 6 milliamperes is mentioned, the strength is generally regulated by the patient. Pain should be avoided, and in this way too great a destruction of tissue is prevented. After a rest of a week or ten days, a No. 7 can usually be passed; then a No. 9 should be taken, and the same operation repeated as before described.

The advantages of this plan of treatment are that there is no bleeding; if so, it is accidental; either too strong a current or the wrong pole has been used. No anæsthesia is required; the pain or discomfort is trifling. The patient can pursue his ordinary occupation during the period of treatment. No serious septic consequences follow, as the process itself is aseptic; the skill in passing a catheter is the only requisition, and in a large majority of cases there is no contraction or return of the stricture.

In Stricture of the Œsophagus, electrolysis has been used with some success; 12 cures we find, though equally as many failures are reported. Besides these, I will report one case treated by Dr. Hunter McGuire:

Mr. D. came to St. Luke's about the 1st of October, 1886. An examination showed three strictures along the œsophagus tract, caused by swallowing some concentrated lye in April. He could only take liquids; sometimes even these could not enter the stomach. For two days at a time no food had passed through the strictures. His physician, a prominent North Carolinian, had been treating them with bougies from the time the strictures commenced to give trouble, but with no permanent beneficial result. After his arrival at the hospital, electrolysis was applied by means of a large metallic bougie, insulated down to the bulb, that was passed through the stricture and then drawn back, so that the bulb rested against the lower border of the stricture. This was applied every two days for a month or six weeks. He improved markedly before leaving. Since then absorption still continued, for I heard a few days ago that he was almost entirely relieved.

In Gynæcology, with the steady advance of our knowledge in the treatment of this class of diseases, electrolysis has assumed an important place.

In the treatment of Uterine Fibroids especially has it been well tested, though with great diversity of opinion. Some report great success, while others have failed utterly, and many have improved their patients by diminishing the tumor without eradicating it. Those who know the power of electrolysis believe that uterine fibroids can be successfully treated. In proof of this we find over 200 cures reported by different operators, using various modes in applying it. Some in comparatively weak currents for a long time, depending more on the alterative effect of nutrition than on the solvent action; others combine the Faradic current with the continuous, whether the latter be mild or strong. Some plunge one, two or more needles into the tumor, while others apply the electrodes externally, or one in the vagina and the other on the surface of the abdomen. The safest and most successful of all methods that have been employed for Arresting the Development of an Extra Uterine Fœtus is that of the galvanic current, for the efficient use of which needles and puncture are not at all necessary. This operation has been more frequently reported in the United States than in any other country; and of 50 cases, 35 of which were

collected by Tarnier and Cazeaux, not one proved fatal. The usual mode of operating is by placing the long flat positive electrode on the abdomen; while the negative electrode, consisting of an insulated cross stem, with a knob, which is introduced into the vagina, is pressed against the lower border of the tumor. The current is then gradually increased, but never enough to cause pain. The pulsation in the tumor generally ceases after the fourth or fifth application; then absorption of the tumor usually follows.

In the same manner of application is electrolysis now being employed to promote *absorption of inflammatory deposits in the pelvis*; and with success.

Art. V.—The Relations that should Exist Between Physicians and Druggists.* By E. A. CRAIGHILL, M. D., Lynchburg, Va.

You'd scarce expect a youth like me,
To get up here where all can see,
And try to tell you what to do,
Doctors, druggists, too.

Now if I fail to satisfy,
"Don't view me with a critic's eye,"
But make allowance for my youth,
And think I only seek the TRUTH.

For more than thirty years, as physician or druggist, it has been my pleasure and privilege to serve my fellow-citizens, and I have had ample opportunity to observe the relations that *do* exist between doctors and druggists, and to form my own opinions as to what *should be* their relations. It has been my conscientious desire to study impartially from both standpoints the amenities of both.

All agree that it is the province of the physician to prescribe medicines, and of the pharmacist to prepare them for administration. This necessarily brings them into the closest and most intimate relations, and their mutual interests should bind them in close amity. Perfect confidence in each other is, perhaps, the most important pre-requisite for the establishment and continuity of such relations; and if both are gentlemen, and moderately even-tempered, they can and should amicably work together, and mutually foster each other's interests. One is dependent upon the other, and I hold that both are bound, by the highest sense of honor,

*Read before the Virginia Pharmaceutical Association during its session in Richmond, Virginia, May, 1887, and published by request of resolution.

(not to put it on the lower plane of interest), to protect the reputation and good name of each other. It is the duty of every druggist to guard, as he would his sacred honor, physicians' prescriptions from the criticism of other physicians, or, indeed, from anyone.

All who write prescriptions make mistakes—generally from inadvertence; sometimes from ignorance. In either case, the duty of the druggist, under the circumstances, is plain. He should carefully avoid letting the patient or his friends know that a mistake has been made, by delaying the preparation by some plausible excuse, until the physician can be seen. A druggist, with tact and judgment, can do this without any prevarication, and without creating any suspicion. If, by word or manner, you even convey the impression that all is not right, you at once arouse a distrust that the doctor has made a mistake in writing, or that you do not know how to prepare the prescription, and the patient's confidence in both is weakened or destroyed.

Sometimes there is a doubt as to whether the prescription is right or wrong. When this is the case, in justice to the doctor, his patient and yourself, give all concerned the benefit of the doubt, by consulting the doctor. There never was a better opportunity for observing the old adage: "An ounce of prevention is worth a pound of cure." Sometimes, when a mistake is so plain that there can be no doubt about it, if it is inconvenient to see the doctor, the druggist *may—in some rare cases*—take the responsibility of correcting, but never without afterwards (and as soon as possible) calling the doctor's attention to it. If a druggist, in the conscientious and unprejudiced discharge of his duty, sees anything in a prescription which he has good reason to believe is not as it was intended; if he, in the proper spirit, directs the physician's attention to it, the latter, if what he should be, can and will take no offence, even, if for reasons of his own, which he is not bound to give, his prescription is as he intended; because his own good sense tells him that the druggist, standing between him and his patient, is only acting in the interest and for the good of all. It can be stated as a fact, and to our credit, that we are much more particular in

guarding and protecting the reputation of the physician than he is with ours; but dereliction on his part, in this particular, does not lessen our duty, inasmuch as two wrongs can never make a right. Physicians are too much given to making a scapegoat of the druggist—blaming him to his customer—when the fault is entirely the doctor's, who, from carelessness or ignorance, has made an incompatible, inert, or too powerful a mixture.

I have heard of over-particular druggists, but have never seen one. I have known those, though, who were not as particular as they should be. They sometimes make mistakes, and it is a much more serious matter, because they have no inspector of their work, as the physician has. Whilst we correct physicians' errors, ours generally go to the grave-yards, but they can never be buried deep enough to keep down the stench which follows. Like Banquo's ghost, "they will not down." If such a mistake is from accident, it is dreadful; if from carelessness, it is criminal; if from ignorance, it is murder, and if the druggist who commits it has a certificate of proficiency from the Pharmaceutical Board, every member of that Board deserves to lose his place. When we remember how many hundreds of thousands of prescriptions are each year prepared within the borders of our State, with almost no accident, it speaks well for our Board of Examiners and all of their licentiates.

It is a question which has been decided every way by the courts, and consequently not decided at all, as to whose property a prescription is after it is on the druggists' file. However this may be, it is certainly unjust to the physician to give a copy of it to whoever asks for it, or to prepare it and sell it to anybody who happens to have heard it cured one of his neighbors. There are a great many reasons why this is absolutely wrong. It is unjust to the doctor, because it is an attempt to get the benefit of his knowledge without paying for it, even admitting that the medicine is what should be taken, which may or may not be the case. And I have known a doctor to be blamed because the prescription prescribed for one person did not cure somebody else for whom it was not prescribed.

A druggist has no right to exhibit his prescription file to anybody to be criticised, and more particularly to a physician. One physician does not like for another to see his prescriptions, but sometimes it is necessary, as for instance, when one succeeds another in the treatment of a case it becomes absolutely essential for its intelligent management, that it should be known what has been given.

There is a practice which has become more common than it should with retail druggists, and my vocabulary is exhausted in finding words strong enough to express my condemnation of it. I refer to their prescribing, or, more correctly speaking, attempting to prescribe, for persons who ask them to do so. My experience is, that the most ignorant are the most given to it. Some of you may take issue with me on this point, and say a druggist is no more usurping his prerogative in prescribing for a doctor's patient than the doctor is in selling medicines to his customers. Admitting that the latter is wrong, it does not make the former right, and I hold that it is a great wrong both to the doctor and the patient; for the druggist is assuming a knowledge he does not possess, thus deceiving his customer, and sometimes doing an injury which descends from generation to generation. I desire to be fully understood on this point. All druggists have remedies already prepared by themselves or others, for every disease, real or imagined. If a customer asks for one of these remedies, he has a perfect right to sell it; indeed, it is his duty to do so equally with anything else he has for sale, notwithstanding they as often do harm as good. Such customers often really need no medicine at all. When they need treatment, the physician and not the druggist, should undertake it. When a person asks a druggist to prescribe for him, if he has any intelligence at all, it is not as a general rule the same motive that actuates him in going to a regular practitioner—that is, because he thinks his chances for relief are better than from anybody else, but because he may get relief without paying for it. Thus there is a conspiracy between the two to cheat the doctor out of a fee he has spent his time, his money and his strength to acquire a knowledge of how to earn, and you are not only

wronging the doctor, but your customer. You may be a perfect pharmacist; your knowledge of Materia Medica, and even Therapeutics, may be the envy of all; your reputation as an expert and accomplished chemist may be co-extensive with this broad land, but all of this will not make you a competent person to prescribe for a disease. Why? Because all this knowledge would not qualify you to know many diseases, or distinguish one from another. And then, from a legal standpoint, you are violatiug the laws of the land, by practising medicine without a diploma, a license, or authority from the Board of Examiners. Some druggists are so conceited I believe they actually and honestly think they know better how to treat disease than the doctors. They might know more than some regularly graduated physicians I have known, and then hardly know enough to keep out of the fire. But all physicians are not ignorant, and as long as there are enough worthy ones to do the work, and that will be always, the druggists have no right to prescribe, and should not be permitted to do so, even if the Legislature of Virginia does, by virtue of his right to practice medicine, give to every physician, however ignorant of what pertains to pharmacy, all the rights and privileges which druggists can acquire only by rigid examination, and can retain only by the payment of an annual tax; or, to express it in another way, as the law now is, if I choose to practice pharmacy as a physician I can do so, but as a pharmacist must be examined and pay a yearly tax.

Druggists, when they undertake to prescribe, usually make no examination, and could not tell what the trouble was if they did. Their prescriptions are based on what the patient says, not on what they see. The most expert practitioner in the world would commit terrible blunders under such circumstances. In my experience I have known cases of primary syphilis entirely amenable to treatment, and which could have been easily and speedily cured, treated by druggists for simple gonorrhœa, because the patient said this was his trouble. Some of these patients are in their graves today, while others are suffering with the most loathsome of all diseases, in its secondary and tertiary forms, transmitting

to their children and children's children a taint and a curse. Who can count the number of sufferers to-day, and those who have lost their lives from urethral stricture by reason of some druggist's malpractice, and the parsimony of the patient, in desiring to get for nothing from an ignorant druggist that for which he should have paid an intelligent physician? It is because, in my humble judgment, druggists do not appreciate the magnitude and the importance and responsibility of this, that I speak so plainly. There is enough ignorance and malpractice among regularly graduated and licensed physicians, without any of our profession entering as rivals in the perpetuation of mischief.

Not infrequently when a physician hands his prescription to his patient, he is asked what it will cost to have it prepared. I think he rarely ever knows, and he should say he does not, because at best he is only guessing. If he happens to guess right, the impression might be produced on the patient that there was a bargain between the doctor and druggist for the former to receive a commission for his influence. Any such arrangement cannot exist with first-rate men; if it exists at all, it is *prima facie* evidence that neither deserves the confidence, encouragement and support of anybody, because the druggist has to cheat his customer out of this commission to pay the doctor, and each becomes a party to a fraud. Again, if the doctor prices a prescription at 25 cents when it should be 35 or 40 cents, your customer thinks you are an extortioner; and if, on the other hand, the doctor says 35 or 40 cents when it should be 25, the impression might be made that the medicine is not the best. When a physician can control his prescriptions, and he generally can, he should permit them to go only to the druggist in whom he has confidence, and leave the price entirely to him.

Druggists catch it on all sides, not infrequently from physicians, on account of their reputed exorbitant charges for everything, particularly prescriptions. If such criticisms ever were just, they certainly are not now, since so many of the prescriptions are for quack medicines, ycleped proprietary, in which there is no profit at all. Some people are constitutional and professional fault-finders, and will grumble

for an hour with their druggist for charging 25 cents for a 4-oz. solution of bromide of potash, which costs the druggist the ingredients, a bottle, cork, label, and time for preparing, to say nothing of his knowledge as to how to prepare it; and the same man will go to your next-door neighbor, who happens to be a shoemaker, and pay him 25 cents to patch his shoe, a service which takes no longer, the material of which costs almost nothing, and the difficulty of acquiring the knowledge of how to do it is not so great. I find no fault with the shoemaker, but I do with the public, for so unfairly and unjustly criticising us. I do firmly believe that the average profits now in the retail drug business—there is no question about the wholesale—are as narrow as in any other mercantile business.

I was educated to believe that any physician who would prescribe a patent medicine was no better than its manufacturer; in short, a quack. Now, it is the exception when you come across a physician who does not. If there are any of that noble profession present—and it is the noblest of all, save one—it is likely they are ready to enter their indignant protest and emphatic contradiction of the statement, but it is true, nevertheless. They draw a distinction, which I do not, between a patented secret remedy and a patented proprietary remedy, which professes to publish its formulary, *but does not.* Take any of this latter class, and their name is legion, and attempt to make it, or even anything like it, that might be substituted, and see how suddenly you will be arrested with an injunction restraining and prohibiting you from making it, in this free country of ours. Why is this? Because every one of these mixtures is protected by *a patent*, registered in Washington. Still the doctors are prescribing them almost to the exclusion of the old-fashioned remedies recognized and approved in the United States Pharmacopeia. More particularly is this the case with the younger members of the profession, and the "woods are full of them," who really seem more zealous in finding a patient to fit some advertised patented proprietary preparation than in finding a remedy to suit their suffering patients. Recently, in a distant city, I counted nearly fifty open bottles of patent medicines in a

dispensing case. In reply to my question, the proprietor told me it was necessary to supply his regular prescription trade. Our profession is just now in the midst of a revolution, which, it is much to be feared, like all others, is not going backwards. It seems now that the time is almost at hand when laudanum and paregoric, syrup of squills and ipecac, tincture of arnica and digitalis will be fossils of the past. I, for one, am partial to the old-fashioned ways and old-fashioned remedies, even at the risk of having the advocates of the modern so-called "elegant pharmacy" disagree with me.

Physicians are much given to criticising druggists very severely for their modes of advertising. Candor compels me to say it is sometimes, indeed not infrequently deserved, because of the sensational and sometimes indecent falsehoods which are often published over the names of reputable and disreputable druggists. It is wrong, very wrong; and I call upon all and each of you to stamp it with your contempt and disapproval.

But whilst our friends, the doctors, thus sit in judgment upon us, may we not reciprocate, and express our views of their modes and customs in the same direction? It is contrary to the code of ethics and not regarded as etiquette for a physician to announce through the columns of his local paper that he is a candidate for general practice; and the profession is almost ready to outlaw one of it members who advertises that he makes a specialty of any particular disease or class of diseases. And yet, these same doctors, some of them at least, who hold up their hands in holy horror and proscribe all such members of the profession for their unprofessional conduct, advertise themselves in every medical journal, and on every page nearly, if permitted; and, not being satisfied with this, rush to the printing offices, publishing monographs on any and every subject, reporting and publishing unimportant cases, crowding the United States mails by sending their effusions to their brother doctors. There is hardly one who has not received a barrel of such rubbish. The excuse for publishing all this literature, so-called, is that it is for the enlightenment and information

of the profession. Some of it is, but the most of it is not; but for the glorification and *advertisement* of the writer. In plainer English, it is not intended by it to tell his brother physician how to treat a case, or to perform a difficult operation, but to let it be known that he knows how, and is ready, *for a consideration*, to treat just such cases as he describes. Some doctors don't see the point; some do.

I have used my best endeavors to compress my ideas into as small a compass as possible, which has necessarily made them crude and imperfect. There are many points I would like to introduce and others to elaborate. Already, though, I have occupied too much of your time, for which I beg you to excuse me.

In conclusion, Mr. President, and gentlemen of the Association, permit me to thank you for the patient forbearance with which you have listened to my prolix talk and to crave your indulgent disregard of its defects. I sincerely congratulate you upon our delightful re-union, which has been, I trust, a source of profit and pleasure to us all. Such it certainly has been to me. Let the aim and object of each of us be to elevate the standard of our noble calling. Our friends, the physicians, will assist us if we deserve it; but, with or without their aid, we must severally do our duty in that direction, by our moral influence and example, by scientific investigation and experiment, and by courteous interchange of ideas and experience, thus encouraging young and old to give their best energies and talents to lift the profession of the pharmacist to the plane it should occupy. And with this ardent aspiration, I take my leave, with sentiments of profound regard for you individually and collectively.

Tongaline.—Dr. Chas. W. Murphy, of Salem, Ind. (Sec'y Wash. Co., Ind., Board of Health, etc.), writes: "My recent experience with Tongaline has been so satisfactory that I feel it a duty to the profession to express the opinion that this new remedy is one of the certainties of medicine. In acute facial neuralgia, hemicrania, gastralgia, and sciatica, tongaline has never disappointed me. It is far preferable to opiates, producing none of those objectionable results such as headache, constipation, impairment of digestion, etc."

Clinical Reports.

Case of Skin-Coloring from the Continued Use of Nitrate of Silver. By WM. D. MEEKS, M. D., Massie's Mills, Va.

The number of well authenticated cures of skin-coloring from the continued use of nitrate of silver are sufficiently few to justify placing upon record the following one. The peculiar color of the skin in this case is almost identical in appearance to one reported in the *Medical News*, April 9th, of the present year, by Dr. Shallenberger:

Mr. W., age forty-two, suffered with epilepsy for thirty-two years. When about twenty years of age he was treated with nitrate of silver by a physician, who was under the impression that he had cured a case of epilepsy in a negro boy by giving large doses of silver.

In the case I am now noting, the treatment was begun by giving small doses and increased until a pill containing four grains was taken three times a day. This was continued until the patient grew very weak; in fact he could hardly stand or walk, as the patient expressed it. The body became anasarcous, and this condition was followed with desquamation of the epidermis and hairs. The coloring of the skin was very marked indeed. In some lights a dull, dark metallic appearance would be given off, and in others a bright lustre, like burnished silver.

The treatment, however, did not abate in any way the severity of the epilepsy. The patient died whilst under my care, about four weeks ago, in a state of epileptic coma.

Maltine Preparations.

"I have recently been using Maltine Preparations, as prepared by the New York Maltine Manufacturing Company, in some cases of phthisis; also in wasting diseases caused by gastric trouble, and take pleasure in recommending them as the remedy *par excellence* for such cases. After a sufficient trial I consider them of great therapeutic value as nutrient and constructives, and shall recommend them most heartily in the future.—G. E. MATTHEWS, M. D., Ringwood, N. C."

Original Translations.

From the French. By R. M. SLAUGHTER, M. D,, Theological Seminary, Va.

Ichthyol in Skin Diseases.

This new remedy in diseases of the skin, now greatly in vogue in Austria and Germany, having been introduced by Unna, of Hamburg, is described by Dr. Lartigan in the *Gazette des Hopiteaux.* It is extracted from a bituminous rock of Tyrol, formed by deposits of decomposed fish and prehistoric marine animals. Resembling in appearance tar, it differs from it in odor, and in chemical and physical properties. It is characterized by its richness in sulphur, which enters so intimately into its composition that it can only be extracted by complete decomposition. It is very soluble, and consequently the contained sulphur produces wonderful effects, and this has led Unna to claim for it an extraordinary value.

According to Unna, the general effect of ichthyol is that of a powerful antiphlogistic. It rapidly reduces the amount of blood in the tissues, and should only be employed when the epidermis is unbroken. If it penetrates to the dermis, absorption becomes too great, and vesicular eruptions are caused, and its use must be stopped.

Ichthyol is specially indicated as external remedy in subcutaneons tumefactions, and in irritations and inflammations of the skin, *the epidermis being intact.* It is a useful remedy in œdemas, angiectases, erysipelatous inflammations, sprains, commencing furuncles, in the rheumatismal manifestations, and finally, in almost all skin diseases.

Its special indications and doses are as follows: In *acne rosacea:* If the form be the erythematous or eczematous with the epidermis thin, smooth, or scaly, with tendency to congestion, ichthyol should be applied in small quantities, 2 parts to 100. In *acne indurata:* The pustules having a tumefied base, the epidermis thick and rough, without tendency to eczema, it should be used in larger quantities, from 10 to 25 parts to the 100. No fear need be felt for the eyes, as is the case with sulphur. In the divers forms of *eczema,* acute or chronic, ichthyol is a most excellent remedy, and one application alone often suffice to produce notable amelioration, particularly in relieving the itching. It is, in fact, a sovereign remedy for pruritus. If, however, the epidermis be

broken, it should be used only in very small quantities, and its effects closely watched. If such be the case, and particularly in chronic forms of eczema, it is well to give it internally. If the epidermis is unbroken, it may be safely used in the strength of 10 to 100. In *lichen of children*, acute and chronic urticaria, erythema nodosum, in the many forms of herpes, and in pityriasis, it is used in the same strength.

In affections of the scalp, or other parts covered with hair, ichthyol possesses great advantage over sulphur, tar, or other remedies such as are usually employed, on account of its extreme solubility in water, making easy to bathe the parts with the solution. In burns of the first degree, it relieves the pain and prevents the formation of blisters. In the treatment of leprosy, psoriasis, sycosis, and lupus, ichthyol serves only as a useful adjuvant. Internally, we would recommend its trial in obstinate bronchitis and bronchial catarrhs, in place of sulphur waters.

Dr. Unna gives *ichthyol internally* as well as externally, in chronic cases, and he claims that as an internal remedy, neither arsenic nor the sulphur compounds approach it in value. The dose for internal administration is from 15 to 30 grains per day, and for children, from 3 to 7 grains.

The most convenient form for external application is the solution prepared by Dr. Gécé. This is a clear solution of the strength of 20 to 100, and is applied with a brush and rubbed in gently with the finger. If more energetic effects are desired, several applications may be made at the same sitting. If a lesser strength is desired, dilute the solution with more or less water, according to effects wished. In all cases, cover the part with a little cotton when the application has been made. In this way the quantity of the remedy can be changed gradually, beginning with a smaller and increasing to a larger, and then going back to the smaller.

For internal administration, where it is of great value in chronic skin diseases, in furuncles, in bronchial catarrhs, and rheumatismal manifestations, it is best given in pills containing 3 grains each—dose, 1 to 2 for children; 4 to 8 for adults, per day. Even these quantities may be exceeded with advantage. The pills should be taken on an empty stomach, and the daily portion may be taken in two or three doses—one before each meal, or the last at bed-time.—*Le Practicien, March* 29, 1887.

Symptomatology of Diabetic Poisoning.

The divers phenomena which make up the symptomatology of diabetic poisoning, as manifested by various organs,

are detailed by Drs. Bernheim and Simon (in *Rev. Méd. de l'Est*), as follows:

1. The digestive functions are often first affected. Symptoms: Vomiting, eructations, pyrosis, and epigastric and hypochondriac pains. These symptoms may indicate a gastritis, or even a peritonitis, as was observed in one case. On the contrary, gastric symptoms may be entirely absent.

2. The respiratory troubles consist of a dyspnœa without any appreciable pulmonary lesion, and evidently of nervous origin. This dyspnœa appears to be a constant phenomenon, sometimes following gastric symptoms, and equally often consecutive to the cerebral excitement.

3. The heart symptoms, very marked in two cases, are cyanosis, hypothermy, weakness of the pulse, collapse.

4. The head symptoms observed were delirium, excitement, convulsions, and finally, coma; the coma, frequently early, following rapidly upon the epigastric pains. Occasionally it does not appear until the end. (*Rev. de Therapeutique*).—*Le Practicien*, *March* 29, 1887.

Therapeutic Action of Aconitine.

Dr. Guesdon (in *Le Progrès Médical*, April 2, 1887) says the elective action of aconitine is upon the sensory nerves, causing reduction or suppression of their functions. At the same time, when this causes anæsthesia, it also quiets the circulation, diminishes the calibre of the capillaries, and lowers the temperature.

Dr. Dumas gives the following indications for the employment of this agent: "In congestive facial neuralgias particularly, and in some other neuralgias *a frigore*, aconitine is an energetic and efficient remedy."

"In catarrhal affections in general, it is useful." There exists for it, as for other alkaloids, a tolerance; and when it is systematically given, no fear may be felt for accumulative effects." "It should be given in very small doses, and at suitable intervals"

Not only is aconitine useful in neuralgias; but it can give the best effects in the painful affections—such as cephalalgia, migraine, plurodynia, and even in articular rheumatism and acute arthritis—as results have attested in several cases. Aconitine is a remedy of well-defined, sure and regular, but very energetic action, and consequently must be given in small doses at good intervals, and use must be made of a preparation of reliably proportioned doses. A perfectly reliable preparation is the *Pilules Monssette*.

Frequently neuralgias are accompanied by well-marked intermittent and periodic symptoms, and then aconitine should be given with quinine. For these complications, Dr. Monssette prepares a pill composed of one-fifth of a milligramme ($\frac{1}{320}$ of a grain) of pure aconitine with quinine, which is reliable.

It is well, in the beginning, to test the susceptibility of the patient by giving on the first day only one pill three times during the day. If marked sedative effects are not obtained, gradually increase to six pills in twenty-four hours, and keep up this quantity until relief is obtained, unless, in exceptional cases, this quantity should not be exceeded. If any diarrhœa occurs, diminish the dose.

Dujardin-Beaumetz, in his *New Medications*, says: "When you use this alkaloid, have great care that not more than a granule of a quarter of a milligramme ($\frac{1}{240}$ grain) be given every six hours, and that not more than four be given in twenty-four hours. Stop the medicine as soon as toxic symptoms are felt—such as tingling of the tip of the tongue, and that strange sensation of loss of elasticity of the muscular orifices of the mouth, eyes and nose, when it seems to the patient the skin of the face is shrunken." I should say that no one should prescribe aconitine unless well read in the subject of its literature, and perfectly sure of the preparation used.—R. M. S.

Treatment of Phthisis by Hypodermic Injections of Eucalyptol.

At the meeting of the Académie de Médicine, on the 22d of March, Dr. Ball read a paper on the subject of this new treatment, instituted by M. Ronsul. Twenty-one patients have been subjected to the treatment. Of these, six have died, ten have been benefited and left the hospital, and five are under treatment. The medicament acts upon the septic cause of the phthisis, and lessens the sweats, diarrhœa, expectoration, and fever. He uses it dissolved in olive oil—one part to four by volume—and injected a gramme of the solution into the thigh.

At the next meeting, on the 29th of March, Dr. Dujardin-Beaumetz stated that the results obtained by him differed in some respects from those obtained by Dr. Ball. He said that eucalyptol diminished the expectoration, but has no effect upon the bacillus. It is susceptible of causing dyspnœa and anorexia. He uses liquid vaseline as a solvent, the proportion being 20 to 50 parts of eucalyptol to 100 of vaseline. —*Le Progrès Méd.*, *March* 26 and *April* 2, 1887.

Grafting with Frog-Skin in Loss of Cutaneous and Mucous Tissue.

In *Le Progrès Médicale*, of April 9th, 1887, Drs. Baratoux and Dubousquit-Laborderie give the conditions necessary for success and results obtained by the grafting of frog-skin, as follows:

The skin should be carefully dissected off, and may be taken from the interdigital membrane, or from the belly or sides, or the blinking membrane may be used.

The following conditions are essential to the success of the experiment: 1, A granulating surface; 2, The absence of bleeding (coagulated blood prevents the contact of the cells in graft with those in granulating tissue); 3, The absence of suppuration; 4, The manageableness and immobility of the wound during the first three or four days; 5, The making during that time antiseptic dressings with the greatest care, and to take the greatest care in making the first dressing, which should be a compressive one. Dr. Baratoux has experimented upon fifteen cases. In three cases of perforation of the tympanum, all were successful. Eleven patients have been treated for non-specific ulcerative rhinitis. In all these cases, from ten to twenty grafts were made, of which more than half lived, and all experienced excellent results. The Doctor always obtained a smooth new mucous membrane. An attempt to close a perforation of syphilitic origin failed.

Dr. Dubousquit has had some successes in treating burns and wounds. Failure was always due to suppuration. At the suggestion of Dr. Panus, he grafted, with very small shavings of frog-skin a large varicose ulcer, which had been treated with iodoform and carbolic acid. The ulcer was then covered with a slightly carbolized compressive dressing, and left for five days. When the dressing was removed, there were found little islands of cicatrization, and in thirty-one days the ulcer was cicatrized, while another ulcer, seated on the other leg, and treated by the usual methods, showed no tendency to heal.

The directions for grafting on mucous membranes are as follows:

1. For the nose: A piece of skin having been dissected, or cut off, is placed upon an open surface with a pair of forceps, or better, with a special pipette by blowing into the other extremity.

2. For the ear: The piece of skin is placed on a glass plate, and moistened with carbolized water or glycerine, or a solution of the bichloride of mercury. It is then to be ap-

plied to the perforation in the manner described in a previous paper. (See this journal, Vol. XIII, pp. 865.) If the graft shrinks, immediately apply another. Before making the graft, the tympanum should be washed with carbolized water.

Medical Students in Germany.

Le Progrès Médicale, of April 9th, says: "The practice of medicine is so encumbered with titulars in Germany that the *Union Générale* of Physicians has sent a circular to all the directors of the gymnasiums (college lyceums) asking them to dissuade their pupils from entering a profession in which the prospects of success are now so restricted. A similar circular might perhaps be useful in France, remarks one of our contemporaries of the medical press."

Analyses, Selections, etc.

Cases: 1, Mammary Abscess; 2, Puerperal Eclampsia; 3, Imaginary Pregnancy; 4, Arrest of Sexual Development; 5, Ovariotomy—not Ovariectomy; 6, Osteoma of Superior Maxilla.

That capable writer and excellent practitioner, Dr. Henry T. Bahnson, of Salem, N C., lately President of the Medical Society of North Carolina, reports some valuable "*Clinical Notes from a General Practice*," to the April No. of the *New Orleans Medical ond Surgical Journal.*

Of *Mammary Abscess*, he reports three cases to illustrate the special value of his plan of treatment. To the diseased breast he applies a square piece of rubber tissue, such as is used by dentists, sufficiently large to cover the whole organ, by *tying* a tape to each corner. The two lower of these tapes are passed around the waist and tied at the back. The two upper tapes are passed, one over the shoulder *opposite* to the affected side, and the other under the axilla of the same side, and tied so as to maintain equable pressure over the diseased organ. A small opening is made in the rubber tissue for the nipple, and milk is occasionally drawn from the breast during the following twenty-four or thirty-six hours—at first by a breast glass, and later by the child, by which time all symptoms of the forming abscess are usually gone. He has applied the rubber tissue even after suppuration in the breast

tissue was developed, and seen the pus absorbed. Abscesses threatening to involve the whole breast have so contracted under this treatment, that, when opened a day or two after the application, they discharged, perhaps, a teaspoonful, and then healed by first intention. Remove the rubber as soon as the inflammation disappears, or else the secretion of milk will be permanently arrested. When desirable to maintain the flow of milk, phytolacca decandra, whether used internally or locally, does good.

Of *Puerperal Eclampsia*, he reports three cases. *Case I.* bit her tongue, about two inches from the tip, half off in her third convulsion, and bled at least three pints. She had no more fits. It being impossible to apply a ligature, he passed a common pin about half an inch posterior to the wound through the dorsum of the tongue to the inner side of the bleeding spot; and pushing the side of the tongue below and past the point with all the force the pin would bear, he brought it out near the edge of the dorsum on the wounded side, stopping the hæmorrhage. He then sewed the edges of the wound together with silk sutures. *Case II.* lost very little blood in labor. Eight hours later she had a fit. He injected morphia hypodermically to overcome restlessness, moaning, and nervousness. Soon afterwards she had a profuse hæmorrhage from the uterus, and immediately afterwards all nervous symptoms passed away. *Case III.* also illustrates the value of blood letting. The Doctor bled the patient about a pint and a half from the bend of the elbow. As to the *cause* of puerperal convulsions, Dr. Bahnson refers to his article in the *Virginia Medical Monthly*, October, 1877, reporting fourteen observations, in every one of which a *morbid appetite for strong food* (boulimia) *for weeks* preceded the eclampsia. In sixteen subsequent cases of puerperal convulsions, the boulimia was present. Of nineteen successive cases in his practice, in which *bleeding was plentiful*—from a pint to nearly a quart—recoveries occurred. Chloroform, ether, morphia, chloral, jaborandi, hydragogues, "packs," lateral decubitus, etc., are good adjuvants—each in its place.

Of *Imaginary Pregnancy*, he reports two cases. Miss ——, æt sixteen, well developed, etc., was raped three months ago. Had missed her period ever since, and has had morning sickness for eight weeks. She had been told that if she was pregnant menstruation would cease and morning sickness develop. Examination revealed no sign of pregnancy, and treatment relieved her.

Miss —— was criminally assaulted while in a buggy four

months previous to coming to the Doctor. She got hold of a medical book and learned the symptoms of pregnancy. Nausea developed, and she was convinced she was ruined. Examination showed that she was not pregnant, and that coitus could not have occurred.

He next reports the case of Miss ——, æt 26, who, when twelve years old, had slight menstrual strain, but has had nothing of the kind since—no sign of the monthly molimen. The parts are all rudimentary, and she does not know what the venereal desire is. It is a typical case of "*Arrest of Sexual Development.*"

Under the heading "*Ovariotomy—not Ovariectomy*," he reports a case of large cyst of left ovary in a colored woman. Seven tappings were practiced in eighteen months. Then, by laparotomy, Dr. Bahnson undertook to remove the cystic ovary, but the adhesions were found to be too formidable. Hence he sutured the cyst walls to the external skin, with a view to establish permanent drainage. Not a bad symptom followed. The cyst has continued (more than three years) to discharge. The woman wears a pad over the orifice, and is so little incommoded that she never loses a day from work.

A white, healthy youth, æt 18, has painless *osteoma of the superior maxilla* of the left side, which does not encroach upon the cavity of the mouth, and but slightly interferes with the nasal passages. The eye is protruded and pushed out of place so as to make the axis point nearly 45° outwards. He can see well enough to read. It began seven years ago and grows slowly.

Inflammation, a Process of Lowered Vitality.

Dr. M. F. Weymann, of Memphis, believes (*Miss. Val. Med. Monthly*, May, 1887) the condition of the tissues during inflammation is a state of lowered vitality; inflammation denotes a *sinking* of physiological resistance of the tissues. Paradoxical as it may seem, cold and heat above 102°–108° are both valuable in inflammatory affections; both stimulate unstriped muscles to contract. But cold is harmful as soon as the vessels do not respond; it hastens gangrene. But pieces of flesh almost running into gangrene can be saved by hot irrigations. Pain means irritation; therefore allay it with opiates or belladonna. A good way to apply belladonna is to mix the extract in equal quantities with glycerine. As long as the arterioles respond, it forces out stagnant blood. Do not use astringents in high phlegmonous processes, unless in great dilution.

Cirrhosis.

After an elaborate introductory to an article on this subject by Dr. Thos. O. Summers, of Jacksonville, Fla. (*N. O. Med. and Surg. Jour.*, May, 1887), he comes more directly to his point by dividing areolar pathogeny into five forms. (1) *Simple hypertrophy.* It is only a partially correct conception of cirrhosis to say that it is a diffuse interstitial *inflammation*, chronic in duration, and resulting in a secondary atrophy of the true parenchyma of the organ or tissue affected; for it often occurs without a symptom of inflammation. (2) *Plastic infiltration*, or exudation, which results from the excessively active conn ective tissue cell which does not go on to the full extent of tissue formation. Such an investment often interferes with the function of physiological structures without impairing the integrity of the structure invested by it. This infiltration may be temporary—disappearing by absorption; but if it rem ains for any length of time, it becomes a chronic obstruction, similar to that produced by chronic rheumatism. (3) *Homologous deposit* differs from simple hypertrophy only in that the excessive formation of connective tissue is focalized, as it were—circumscribed and nodular in appearance, with no apparent regularity of formation—the neoplasm being organized just where it may happen to be deposited. Surgeons meet with this condition in excising fibrous tumors from the neck, abdominal and thoracic walls, etc.; the irregularity of their attachments give annoyance in attempting clean dissections. Fortunately, these deposits rarely occur in parenchymatous organs. (4) *Heterologous formations* are easily and often developed from the neoplasm of the connective tissue cell. So primordial is the character of this cell, that it readily assimilates itself to surrounding tissues. (5) *Histophagic absorption*—the most interesting phenomenon of the five. The connective tissue cell, if not a brother, is a first cousin to the white blood corpuscle. When the latter escapes from the blood vessel, it is, ten to one chances, that it will meet with a connective tissue cell, and they cause enlargement of the organ or tissue in which they escape, followed by an atrophy which results from absorption of pabulum from the channels of nutrition, followed by their own destruction from engorgement, leaving in their track a physiological waste. As to the rational *treatment* of these pathological conditions which characterize areolar tissue development, it is that adopted in all leucocythæmic conditions:—Diminish the proportion of white corpuscles. Stimulate an intra-vascular osmotic current by increasing

the solid constituents of the blood. Keep the channels of secretion and excretion open. Calomel is the best remedy. Begin in the evening with—

℞. Pulv. Doveri.....gr. xv.
Hydrarg. chlorid. mit.....gr. x.
Sodæ bicarbon.....ʒj.—M.

Take also a hot mustard foot bath immediately before retiring. In the morning take a full glass of Hunyadi water. Then— ℞. Potass. iodide.....℥j
Hydrarg. bichlorid.....gr. j.
Tinct. cinchon. comp.....ʒxij.
M.—S. Tablespoonful an hour after each meal.

If this causes coryza, diminish the dose. If practicable, take three Russian baths a week. If these cannot be had, let the patient sit on a bottomless chair, under which is a vessel of water heated by a spirit lamp. Then throw a blanket over the patient and chair. Rub the patient every night with lanoline, to soften the skin. In the morning, sponge this off with ammonia water, and rub the skin with a crash towel. Diet plain; not highly seasoned. Avoid sugar, coffee, potatoes, pork, and alcohol. If the latter is called for, give sherry wine. Use rare beef in moderation. Oysters, fish, game, eggs ad libitum. This plan has cured some inveterate cases.

Dilatation of Rigid Os Uteri with Condom.

Dr. C. P. Wilkinson, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, May, 1887) the case of a primipara, about to miscarry at sixth month. To complete the labor, dilatation at this stage of pregnancy must commence at the internal os, continue through the cervix, expand the external os, etc. The cervix was too small to admit a Barnes' dilator. Hence he introduced a small female catheter into a condom and tied the open end tightly to the handle end of the catheter, and attached the tube of a fountain syringe. He introduced the catheter, covered by the thin rubber bag, through the cervix into the womb, and raised the bag of the fountain syringe, which was filled with warm water. The condom rapidly filled, and he had an artificial bag of waters, doing excellent work. The constant pressure of the distended condom, however, gave too much pain. He lowered the bag, and from this incident took a hint. He raised the bag during a pain, and lowered it when it was absent. In four hours, the dilatation admitted two fingers, and the labor was artificially completed. Every antiseptic precaution was used.

Coryza and its Treatment.

Dr. D. B. Frontis, of Wadesboro, N. C., believes, with Dr. Lees, that acute coryza is essentially a vaso-motor neurosis. Cold or application of direct irritants to the sensory fibres of the fifth pair of nerves distributed in the nasal mucons membrane reflexly excite the vaso-motor nerves, and congestion and hyperæsthesia result from the vaso-motor paresis.

He divides the *treatment* of coryza as to (1) the stage of congestion and hyperæsthesia, and (2) that of secretion and exudation.

In the *first* stage, give of potassium or sodium bromide, gr. xxv or xxx, to quiet the reflex excitation and relieve the hyperæsthesia. In neurotic females, the local application to the nasal membrane of a two per cent. solution of cocaine muriate, with an ordinary drop-tube, will have the happiest result; and repeat every half hour or hour. Dr. Krakauer inserts in each nostril, with good results, a small tampon, 3 or 4 cm. long, saturated with a five to ten per cent. solution of cocaine or ten per cent. solution of menthol, and allows it to remain four or five hours. To relieve the congestion, belladonna or atropia is almost a specific. Bartholow begins with five drops of the tincture of belladonna, to be followed by one or two drops every hour until atropinism is produced. Brunton uses one drop of tincture of aconite to two of belladonna every hour. Atropia is better, but never begin with more than $\frac{1}{120}$th grain, to be repeated every four to six hours for three or four doses. Give first dose at bed-time, and the second in early morning. This aborts a cold when used within the first day or 36 hours. To combine quinine, from gr. iij to gr. v, with the atropia, prevents much of the uncomfortable dryness of the throat. A pinch of common salt, or holding a small piece of ice in the mouth, increases the moisture of the throat. If the case is not seen until 48 hours, give the bromide, followed with a pill of opium, gr. ss and camphor, gr. iij, repeated every three hours for 3 or 4 doses.

In the *second* stage, favor secretion, and let the congested mucous membrane empty itself. For this, give quinine, gr. ij to v, with Dover's powder, gr. j to ij, and repeat every 3 or 4 hours. Occasional inhalations of hartshorn favor secretion. In late cases, give salicylate of ammonia ℈j every 4 to 6 hours. If the nose is obstructed, use douches of warm water ⊙ss, impregnated with a tablespoonful of common salt.—*N. O. Med. and Surg. Jour.*, April, 1887.

Actinomycosis.

The special correspondent of the *Alabama Medical and Surgical Journal*, May, 1887, reports a clinical lecture by Prof. Billroth, of Vienna, on this subject. The patient, æt. 20, waiter, always healthy during youth, during the past three years slept in a room over a horse stable—the sole time he has dealt with merchants of beasts. About seven months ago he had a severe cold; in two days severe abdominal pains and diarrhœa set in. No appetite, but no vomiting; was treated a long time with ice applications. The abdomen distended above the navel, and became very hard. A month later he was better. A month later, the patient noticed a perforation below the navel which discharged a litre of thick, yellow-green pus. Two weeks later, swelling with induration of the inferior lateral parts of abdomen occurred, which opened and discharged thin pus, followed later by dark serum. The upper fistula contracted meanwhile but discharged clear serum. The secretion is now thick, pale, and coagulates promptly. A peculiarity of it is a number of little yellow granules in it, which granules make the diagnosis *actinomycosis*. The abscess itself seems to be in the retro-peritoneal cellular tissue. The practical treatment in this case is to detach the skin around the fistula, seek for the canal, inject tincture of iodine, and insert a small drainage tube.

The little granules are vegetations of moulds which are the true cause of the whole process. This mould is a radiant fungus, called antinomyces. Tonfick of Breslau, first described these moulds ten years ago. When present under favorable conditions of nutrition, as in pus, they assume other forms, do not pass certain stages, and remain in these.

Veterinary physicians have long known this disease, especially in the cow. An enormous deposition developes on the maxillas with partial necrosis; the teeth fall out, and cavities form, in which the fungus gathers in large masses. In late years the affection has also been observed in swine and horses. But we have yet to learn where the beasts get the fungus-actinomyces which affects them. Man may receive the actinomyces from beasts, but possibly he gets it with the legumes or any part else. The fungus may vegetate on the surface of the mucous membranes, but it can penetrate the tissues, and first produces exertions of irritation—a sort of formation of irritation. The irritation being exerted results in the formation of new tissues, callous thickening, and on bone-surfaces results in the formation of osteophytes. In time, suppuration occurs, abscess develops.

Peculiar Cases of Fatal Blood Poisoning—What Is It?

Dr. F. A. Schmitt, of Schulenburg, Texas, who reports the case (*Daniel's Texas Medical Journal*, May, 1887), was invited by Dr. W. W. Walker to see a bright, lively, well-nourished child, twelve months old, playing on the floor. It had a peculiar dark discoloration covering a spot about the size of an adult hand on the left thigh, near the hip, which had come on a few hours before without inflammatory swelling or pain. In a short while it became perfectly black. Blood extravasation was so marked that it appeared as if there had been a recent injury. In half an hour discoloration appeared on the right thigh, resembling hypostasis. There were no constitutional symptoms at that time nor previously. No material change took place up to the time of Dr. Walker's visit the next day (Sunday), but at 4 P. M. the next day (Monday) he was hurriedly summoned to the child. Extreme sudden prostration had set in; pupils dilated, pulse 120, temperature 100°F., discoloration was spreading downwards on the right thigh; a like dark spot developed on the elbow and one on the back, but on the left side the discoloration had somewhat faded. Quinine and tincture of iron internally were immediately prescribed, and the diseased parts were annointed with carbolized petroleum ointment. Dr. Schmitt saw the child at 10 P. M., when in a dying condition. The primarily affected parts (left hip) were then of an almost normal color, but on the right side the discoloration had extended to the ankle joint, and here a gangrenous ring, 1½ inches wide, encircled the leg, covered with blisters, exuding a dark fluid, leaving the foot its normal color. The leg, from knee downwards, was covered with liquid tar. Death occurred 54 hours after the first symptoms were noticed.

While there was nothing apparently in the condition of this child when Dr. Walker first asked Dr. Schmitt to see it to justify a grave prognosis, Dr. Walker, however, then said that ten years ago he attended a similar case in an infant with Dr. G. W. Jones, which died in 50 or 60 hours from the onset. He, therefore, took a very serious view of this case from the beginning.

Dr. Buford, of Weimer, Colorado county, has had a similar case—the child dying in five days. Dr. Buford's attention was called to his case "as a curiosity," while attending another patient in the same family. The child was otherwise well at that time. On the fifth day, however, Dr. Buford

was likewise hastily summoned, to find the child dying—a large part of the body black or colored, like hypostasis.

In neither of the three cases did any one hear of or suppose that a poisonous bite of insect or reptile, or that an injury had been received as a cause. But Dr. Schmitt imagines that the *materies morbi* was some animal poison—perhaps the monades of Hueter, spoken of in a paper in the *Courier Record of Medicine*, Vol. II, page 14.

Retinoscopy in Defective Vision.

Dr. Wm. B. Meany, of London, England, calls attention (*Southwestern Medical Gazette*, May, 1887) to the "method of retinoscopy," a method of determining refraction of the eye, and of correcting errors by means of ordinary trial glasses without help from the patient. A concave opthalmoscopic mirror is alone required. Seat the patient in a dark room, with a lamp so far back over his head that it throws no direct rays upon his face, and consequently requires no moving during examination. Then the observer—having previously corrected any ametropia that may exist in his own eye—takes position about 120 cm. in front of the patient, and directing him to look at the perforation in the mirror (which should be a concave one, with 22 cm. focus), the physician will be enabled to reflect the light along the visual axis. Thus we obtain the red fundus reflex. Now rotate the mirror from side to side on its vertical axis; a shadow comes out from behind the pupil, moving horizontally across the illuminated part. The edge of this shadow may be linear or somewhat cresentic. Its direction may be either vertical or oblique if astigmatism exists. The shadow moves either in the same or the opposite direction to the mirror, so that when the latter is tilted to the right the shadow may come from the left, or *vice versa*. The "method of retinoscopy" depends on the behavior of these shadows. If the shadow be vertical and moves with the mirror, the case is one of myopia; but if it moves against or in the opposite direction to the mirror, it is either one of hypermetropia, emmetropia, or low myopia. In the case of the eye, the greater the ametropia the larger is the circle of diffusion, and the weaker the illumination, so that the image we see is less bright and its edge less distinct. On looking through the perforation of the mirror we get the ordinary fundus reflex; bright, if the patient be emmetropic, less so the greater the ametropia. We now rotate the mirror on its vertical axis to the right. If a vertical shadow comes across the pupil from the pa-

tient's right, *i. e.*, in the same direction as the movement of the mirror, or if the shadow move in the same direction as the circle of light on the patient's face, the case is one of myopia. Should the shadow be well defined and move in the opposite direction to the above, it can safely be assumed to be a case of hypermetropia. Each eye must, of course, be tried separately.

Intra Cranial Tumor—Diagnosed from Meningitis.

Dr. J. M. DaCosta, of Philadelphia, gives a clinical lecture (*Progress*, May, 1887) on a well-nourished, bright, intelligent boy, æt 15, well until a year ago, when headache began, confined to the forehead—very severe at times. Last summer, while at work (mule driving), he fell on the back of his head; the headache became worse, accompanied by vertigo. Sight was dimmed; and, gradually progressing, power (but not sensation) in the right arm and leg was lost two months ago; drags right leg in walking. Anæsthesia was noticed on the left side of face; taste was lost on left side of his tongue; left ear became deaf, and two weeks ago ringing developed in the right ear. He has convergent strabismus; pupils nearly equally dilated. He walks straight with his eyes shut. Standing with his feet together and looking up to the ceiling, his body sways very much. His temperature, if anything, is subnormal.

This is either a case of chronic meningitis with thickening at the base of the brain, or else it is a tumor of the brain. Notwithstanding the history of a fall, etc., points to meningitis, there are these facts which contradict such a diagnosis: (1) Absence of fever—meningeal troubles always give rise to fever or febrile fits, and often that fever is nocturnal, and often causes nocturnal delirium. (2) The temperature is against meningitis. (3) In meningitis of the base, superficial portions of the brain become affected, and irritability of temper and other cerebral symptoms besides headache will develop—but this boy is intelligent. (4) The boy has had no convulsions, which are more apt to occur in meningitis with thickening, than with tumor.

The age of this boy is against the idea of malignancy of the tumor, as well as against intra-cranial aneurism. Besides, the stethoscope placed over the brow does not give the buzzing sound of aneurism; but this test is not always to be relied on, for aneurisms do sometimes occur without being heard by the stethoscope.

As to the location of this tumor (which is Dr. DaCosta's

diagnosis), it must be very low down at the base of the brain to press on the origin of the nerves as they go to the left side of the face to cause paralysis of *sensation on one side of the face* and palsy of *motion on the other side of the body.* It must be near the origin of the left nerves, on the left side posteriorly above the decussation, to account for loss of sensation in the left side of the tongue and face. It presses, moreover, *very* near the origin of the portio mollis before the nerve goes into its two branches, for the portio dura is also paralyzed; the gustatory nerve is paralyzed.

As to treatment, give potassium iodide, gr. x, and mercury bichloride $\frac{1}{24}$ grain, and increase the potassium iodide to twenty grains, three times daily. Blister the back of the neck. Give laxatives two or three times a week. If headache prevents sleeping, give chloral.

What to Say to Cancer Patients.

Dr. Robert T. Morriss, New York, has a good article on this subject in *Progress*, May, 1887. He advises to write out your statements somewhat as follows:

1. Patient, age 45. Small *epithelioma of lip.* Chances for cure or fatal ending about equal, if under competent surgeon. "Drawing out" method (arsenious or pyrogallic acid, or zinc terchloride) as good as operation, but operation more speedy and less painfnl. One treatment generally gives relief one or more years; but revisit the surgeon on first sign of re-appearance. No known medicine is of service as a cure.

2. For patient, age 45, with *moderate scirrhus of breast*, write: Radical operation possibly may cure; you will probably not be cured. If each recurrent growth is removed promptly, death wlll not occur until cancer attacks an internal organ. Operation is not dangerous. When dressing is removed, in about three weeks, wound is healed. "Drawing-out" method exposes to danger. No medicine cures.

3. Patient, age 45, with *large scirrhus of breast*, involving costal periosteum, write: Cure impossible. More comfortable for year or so if cancer is removed. No surgeon wishes to operate except to give short periods of relief; but general infection will soon take place.

4. Age 45, *cancer of cervix uteri*, write: Hysterotomy may relieve for a year or more; generally only a year. Operation is dangerous, but worth risking.

5. Age 45; *epithelioma of leg below knee*, involving bone, but not groin lymphatics, might write: Amputation above

knee may cure completely, but chances of return about even. No other treatment of avail.

6. Where cancer has progressed rapidly, so as to augur badly for chances of escape, and yet the disease seems quite local, and tissues and lymphatics near by not involved, write: Expect disease to return at no late day, but repeated operations for a year or two will give intervals of relief, and respite of several years may be gained.

Interstitial Uterine Fibro-Myoma Complicating Delivery—Enucleation.

Dr. E. J. Beall, of Fort Worth, Texas, reports a case of uterine fibroma (*Daniel's Texas Medical Journal*, May, 1887,) illustrated by a wood cut, to show how it so obstructed the progress of the child's head as to prevent delivery unless either the growth was sufficiently lessened in size or the child's head diminished. He determined on enucleation. Patient was anæsthetized and put in lithotomy position. He introduced his left hand *per vaginam*, upon which he guided long-handled scissors and freely incised, perpendicularly, the capsule of the fibroid. Withdrawing the scissors, he began enucleation with the fingers of the hand in the capsule. He followed the tumor upward, with the capsule covering the dorsum of the hand and the palmar surface on the tumor until his arm was introduced nearly to the elbow, so as to reach the superior limit of the tumor—enucleation being all the while performed so far as the left hand could reach. The left hand was then withdrawn and the right hand inserted, with which hand enucleation was completed on the opposite side of the tumor. This being done, during "a pain," he grasped the fibroid with his hand, and, by twisting, liberated the few apex attachments that he could not reach during the enucleation process, and withdrew the now detached tumor from the uterus. As the tumor was withdrawn during a pain, he kept the left hand externally upon the body of the womb to stimulate further contractions, as a precaution against hæmorrhage. Immediately before the extraction of the tumor, he administered hypodermically a drachm of the fluid extract of ergot. The pain succeeding the expulsion of the tumor, engaged the head of the child, and soon a female child, weighing ten pounds, was safely delivered. The placenta was immediately expressed. Only the usual quantity of hæmorrhage after natural labors resulted. The fibroma weighed two pounds and thirteen ounces. Antiseptic after-treatment was adopted, and recovery was satisfactory.

Fractured Skull—Trephining—Pus Discharge—Recovery.

Dr. A. H. Holmes, of Benton, Miss. (*Miss. Val. Med. Monthly*, May, 1887), was called to a negro boy, æt. 17 years, two days after his skull was "smashed in" with a billet of wood. The blow was on the frontal region, near the junction with the coronal suture. There was a fracture on each side of the frontal sinus, but not across it. He had been in profound stupor since the injury; extremities cold and pulseless; respiration about 5 per minute; tongue protruded, swollen and black. Trephined at once partially between the two fractures, *near* the sinuse. On elevating the depressed bones, the circulation became better, but the patient remained in about the same condition. Three days ago, an extensive contusion over the upper occipital region was opened, and discharged half of pint sanious pus. There was evidence of more blows than one, but no other fracture. In a few days was well, and playing base-ball.

Malignant Tumors.

Dr. J. E Kintz, of Somerset, Ohio, furnishes to the *Southern Medical Record*, May, 1887, some notes of Professor Gaston's lecture on malignant tumors. Cancerous disease occurs in the female, as compared with the male, about as 3 to 1. All forms of malignant tumors possess the following characteristics in common:

1. They are all deficient in plastic material, but contain a large amount of albuminous substance, or the protein prinples of the blood.

2. All, under the microscope, consist of a fibrous stroma, and granules or cells, which bear the relation of contained and containing parts. The cells often contain nuclei and nucleoli.

3. They occur in nearly all the organs and tissues in both sexes, at all ages, in all temperaments, in all occupations, often at the same time in a number of localities, and frequently display marked hereditary tendency.

4. They occur generally as a circumscribed tumor, but frequently as a stratum or an infiltration.

5. They are deposited as a secretion in fluid form, but soon become concrete. After a time, they work their way to the surface by ulceration. The sore which results is incapable of forming healthy granulation.

6. They are constitutional, or connected with a contaminated condition of the blood and solids. They usually appear without any assignable cause; but sometimes as the

result of injury. They tend to return after extirpation, either at the original or some new point. They usually cause death in nine or eighteen months after they first appear. As they advance, they are apt to involve neighboring lymphatic ganglions.

In shape, the cancer cell is generally spherical, about one-thousandth of an inch in diameter, has oval eccentric nucleus, and one or more nucleoli. As a rule, the largest and most perfect cells are found in scirrhus, particularly those of slow growth; the less perfect are in encephaloid and rapidly developing forms of the disease.

The rest of the unfinished article is taken up with the usual descriptions of scirrhus and encephaloid, giving structure, progress, and symptoms.

Incised Wound of Spleen—Recovery.

Dr. W. F. Hyer, Holly Springs, says (*Miss. Val. Med. Monthly*, May, 1887) on October 29th, 1884, Dr. Britt was stabbed with a pocket knife. Blood flowed freely from a deep incised wound 3½ inches long, transverse to the body, penetrating through the abdominal wall into the substance of the spleen. He administered to himself a hypodermic syringe full of fluid extract of ergot, soon after which the profuse bleeding stopped. By simply retracting the edges of the wound the wounded spleen was easily seen. Cavity was free from clots. Deep sutures with prepared horse hair united the edges of the wound. Temperature rose the next night and continued. Quinine was given, but on November 6th temperature was 105°F. The stitches were removed several days earlier, and union was incomplete. That night a supposed hæmorrhage re-appeared from the wound, but the discharge proved to be dark bloody pus, filled with disintegrated spleen substance. Introduced a tent to bottom of wound, which was kept open until the cavity gradually filled up in a few days. When this abscess burst temperature fell to 101°, and subsequent fluctuations were easily controlled by quinine. On December 8th the Doctor was able to ride to town. At that time Dr. Hyer paid no attention to aseptic surgery; now he is a firm believer in it. The total amount of pus discharged when the abscess opened probably amounted to four ounces.

Ligation of External Iliac Artery for Femoral Aneurism.

Dr. J. McF. Gaston, of Atlanta, Ga., adds a supplemental report (*South. Med. Record*, May, 1887) to a case of femoral aneurism, coexisting with popliteal aneurism, relieved by

ligation (Jan. 30) of the femoral below Scarpa's triangle. February 18, silk ligature still retained, an elastic strap was secured to it, and fastened to a belt around the waist. A small roll of cotton near upper angle of incision, over which the loose end of ligature passed, gave perpendicular traction upon the confined loop. Drawing slightly with the hand daily, caused tension which assisted in dislodging the ligature; repetition of this on 24th brought it away. The same day, patient removed ligature from the wound connected with the femoral, where it had been for three months. There was more suppuration from this closed incision, treated antiseptically, than from the open wound after ligation of the external iliac. This offers no encouragement to expect absorption or encysting of silk ligatures upon arteries in the thigh, whatever may result in the pelvic viscera. A sequel of the external iliac ligation was cessation of pulsation in tumor, with dimunition in size and firmness, for six weeks, when pulsation continued in small mass that remained. He suspected it might result from re-development of the profunda through the anastomosing vessels; on lifting up the tumor so as to relieve the impulse from beneath, no pulsation could be felt in the mass. Thus the double operation cures both the popliteal and femoral aneurisms, and restores circulation to the limb.

Cases of Scarlet Fever.

Dr. H. Christopher, of St. Joseph, Mo., summarizes (*South. Med. Record*, May, 1887) his conclusions of a study of some cases in his practice, as follows:—(1) Fumigation and two months' ventilation did not destroy the virus. (2) Eruption in one case re-appeared eight days after the first appearance, was more violent than at first, and ran the usual time. (3) All were treated on general principles, which were as effective and rapid as any supposed specific treatment.

Things.

Is the title of the Annual Oration by Dr. R. P. Huger, of Anniston, before the Alabama State Medical Association, April 14, 1887, at Tuscaloosa. (May No., 1887, *Alabama Medical and Surgical Journal*). It is a reflective and prospective address, injured by curtailment, but interesting to the general reader as well as professional. It will be completed in the June No. of the excellent journal which contains the first part (16 pages).

Treatment of Remittent Fever.

The concluding portion of the article by Dr. John T. Jones, of New Orleans (*Atlanta Medical and Surgical Journal*, May, 1887), does not claim that quinine checks remittent fever in every case. It is even sometimes contra-indicated for somecause. If tenderness over epigastrium, nausea or vomiting after quinine, mustard plaster or even fly blister may be required locally. To stimulate liver, quiet the stomach, drain portal congestion and open bowels, taken on empty stomach, a grain of calomel with twentieth grain of mercury bichloride. Use small doses of digitalis when circulation is feeble, and as a diaphoretic and diuretic when urine is scanty or high-colored. Tepid sponging reduces temperature. Warm pediluvia restore warmth, when cold hands and feet indicate internal congestions. Congestive brain troubles are relieved by ice bags to head and warm foot-baths, but discontinue if the pulse flags. Next to quinine, blisters to the feet, calves of legs, etc., during remissions are useful in checking the disease. They produce a nervous stimulant impression and act as derivatives. Nervous stimulants (camphor, valerian, etc.) are good in nervous depressions, low muttering delirium, etc. Do not forget proper supporting measures.

Granular Conjunctivitis with and without Pannus.

Dr. W. Cheatham of Louisville, in his paper (*Atlanta Medical and Surgical Journal*, May, 1887) refers to the management of *trachoma*, and not simple hypertrophy of papilla. It is due to bad hygiene, eye strain, contagion, suppurative conjunctivitis, etc. Isolate patients until well, and let them use individual basins, towels, etc. When the disease is detected, use atropia to rest the eyes and to test for refractive errors. Such errors, near-sightedness, astigmatism, etc., are frequent causes, as are nasal troubles in relapsing cases. Avoid sweets, tobacco, tea, coffee, bright lights, etc. Continue atropia as long as it does good. An eye bath of salt water, or one teaspoonful of dest. ext. hamamelis in three or four parts of water may be used. To prevent disagreeable local effect of atropia, and put in the inner canthus, so as to get into the cul-de-sacs, two or three drops of solution of five grains of bicarbonate of soda and boracic acid, in an ounce of camphorated rose water, or hamamelis ʒss and distilled water ℥iiiss, or zinc sulphate gr. ss. may be added. When this treatment does not succeed, apply with a brush either silver nitrate, gr.

v or x, to distilled water ℥j; or apply to everted lid muriate of ammonia, alum or sulphate of copper in substance. Or

℞. Hydrarg. oxid. flav.,..... gr. j–vj
Cocaine muriat..... gr. vj.
Lanolin.....
Ol. oliv..... aa ʒij

M.—S.: Lift lid and rub *well* into conjunctiva once or twice daily, but not too close to bedtime.

When blood vessels run over the cornea (pannus) one application (with mop or camel's hair brush) of *impalpable powder of jequirity* answers. It produces very severe inflammation, or else it does no good; but the inflammation is easily controlled. After the application, the eye is not even to be washed, unless the pain and swelling are *very* great. Let the patient stand the pain for an hour or so. Then apply cold cloths and bathe the eye with a weak solution of boric or carbolic acid. An opiate may be needed. Notes of several cases are added.

Prophylactic Medicine.

This is the title of a paper by Dr. M. D. L. Jordan, of Milan, Tenn. (*Mississppi Valley Medical Monthly*, May, 1887). Without knowing the nature and origin of some diseases, we may exempt ourselves from them by knowing their habits. Thus malarial fever may be avoided by keeping out of night air and sleeping in an upper story. But a knowledge of the causes of diseases furnishes the foundation stone on which in reality to build the science of phrophylaxis. To destroy the special causes of diseases, the best disinfectants, etc., are heat, mercury; bichloride, iron sulphate, zinc chloride, sulphurous acid, sunlight, and pure air; and for yellow fever, cold. Against portable diseases, quarantine; *i. e.*, yellow fever, cholera, etc. In diseases having specific germs, and multiplied only inside the sick body and communicated to the well body by the excretions, thoroughly disinfect the discharges. In several cases of typhoid fever he has used "Listerine" with favorable progress of the cases.

Urinary Calculus.

Dr. James Guild, of Tuscaloosa, says (*Alabama Medical and Surgical Journal*, May, 1887) he has a urinary calculus weighing 2½ ounces, taken *post-mortem* from the bladder of a woman, æt 18. She was in a dying condition when called to her thirty-six hours before death, which was caused by chronic intense cystitis.

Extirpation of the Uterus for Hydramnion.

Mr. Lawson Tait, of England, was called in consultation in the case of a woman who had been delivered of a male child nine months previously. An abdominal tumor had developed in the last few months, and the abdomen was much distended. She gave a history of tertiary syphilis. Dr. Thomas W. Thursfield, physician to the hospital at Leamington, England, diagnosed an ovarian tumor, and advised her to consult Mr. Tait, who was somewhat doubtful, but was inclined to agree with the Doctor, and advised an operation. He made an incision in the median line down to the tumor, passed his hand through the opening and around what proved to be the uterus, and thought removal of the uterus necessary. A large aspirating needle was introduced and at once revealed a hydramnion which had not been recognized until then. Not less than three gallons of fluid were drawn off. The uterus, with its contents, was then lifted from the abdominal cavity and clamps were applied to the uterine neck. The operation was performed as in the removal of the uterus for fibroid. The stump was retained on the outside of the abdominal cavity. The case was one of twin pregnancy of five months' duration. Both fœtuses were healthy in appearance. Mr. Tait said he had never seen a case of hydramnion in which there was not a twin pregnancy. He thought the operation justifiable, and that he would not hesitate to perform it again if this case recovered. He would not expect a greater mortality than five per cent. from such operations. When last heard from (March 13th) the patient was rapidly recovering, and she was expected to be entirely restored to health within a week.—*Alabama Medical and Surgical Journal, April*, 1887.

Spontaneous Rupture and Cure of Hæmatocele.

Dr. E. P. Lacy, Wheeling, Ala., writes (*Alabama Medical and Surgical Journal*, April, 1887) that on March 28th, 1884, he was summoned to Sallie A., who had fallen and received some severe injuries, but complained only of intense pain in the bowel. He thought an action from the bowel would relieve her. A vaginal examination revealed what the Doctor thought to be a large hæmatoma. The diagnosis of hæmatocele was made and confirmed by subsequent events. Hypodermics of morphia were administered. The patient was unable to void urine for a week, at the end of which time the tumor ruptured through the rectum, causing immediate relief of all the symptoms. Treatment was only palliative.

Ruptured Uterus—Death.

Dr. A. B. C. Nichols, Fosters, Ala., reports (*Alabama Medical and Surgical Journal*, April, 1887) the case of a woman who had been in labor for fourteen hours, and who was attended by a colored midwife, who stated that the patient had progressed well until a few hours before she sent for him. After protracted hard pain, the left arm protruded, when all pain ceased. Dr. Nichols immediately made an examination, and found the left arm protruding and in a state of decomposition. The patient was very much dejected, with all the symptoms of ruptured uterus, although the child remained in the womb. Dr. R. L. Lucius was called in consultation. The pelvis was too small for the introduction of the hand to perform version, even after the protruding left arm had been amputated at the shoulder joint. Accordingly Cæsarean section was advised, but the sinking of the woman was so rapid that further efforts at delivery were abandoned. Death resulted in a short while. A post-mortem revealed rupture of the womb on the left side, extending from the cervix to the fundus. The fœtus had become impacted in the contracted pelvis, thereby preventing its escape into the abdominal cavity.

Two Cases of Abscess of Liver.

Dr. S. R. Olliphant, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, May, 1887) two cases of hepatic abscess. *Case I*, male, age 23. In 1879, had diarrhœa, followed by malarial fever, and malarial cachexia has continued since. Pain developed over right lobe of liver, which organ was swollen and sensitive; temperature 99; no jaundice. He explored with a hypodermic syringe the most prominent point of enlargement, and drew out a syringeful of pure pus. Then (April 27) applied Vienna paste for the purpose of causing adhesions and to diminish the thickness of the abdominal wall at that point. The day after the paste was first applied, the discharge was scraped out with the handle of a scalpel, and a fresh application was made. After the third application, the abscess burst and discharged seven pints of pus. The cavity was washed out with water, compound tincture of iodine and carbolic acid three times daily for a few days. Diarrhœa set in May 1st, which assumed a dysenteric character towards the last; fever occurred, which was off and on relieved by quinine. Death on May 23d. The temperature never went higher than 102°, nor lower than 97°. At first, the stools were slaty dark, with particles of

undigested food. Post mortem showed the original abscess cavity contracted to ℥jss capacity, with strong adhesions all around; gall bladder contained 8 gall stones and ℥ij bile. *Case II*, male, between the ages of 20 and 30 years had several lung hæmorrhages; yellow fever 1878. On October 28, 1885, severe neuralgic pain struck him in the left hypochondriac region, and was suffering intensely next morning; temperature 103°; no jaundice. November 1st, a fluctuating bulging of left side under the ribs was noticed. Exploring needle, deeply passed, found pus. Vienna paste applied over most prominent point of bulging. November 2d, paste had formed deep eschar 1½ inch in circumference. November 3d, the pus being more superficial, the abscess was opened (under anæsthesia) by an inch-and-a-half long incision through the eschar, and pus flowed freely. Cavity was washed out with water, carbolic acid, and compound tincture of iodine, and filled with strips of lint. Cavity diminished rapidly. Opening kept open with sponge tents. In two weeks patient was up, and in four weeks was going about, but the sore ran for months.

Axial Rotation of Unilocular Ovarian Cysts—Ovariotomy—Recovery.

Dr. C. S. Briggs, editor of the *Nashville Journal of Medicine and Surgery*, in his May issue, says he was called (February 26th) by Dr. T. H. Wood, of Nashville, to see Mrs. ——, age 37, with presumably an ovarian tumor, which began eighteen months or more ago. Youngest child eleven years. A swelling was first noticed in right iliac region, and the usual history of large ovarian cyst of the *right* side. But during the night of March 16th, the patient was seized with violent abdominal pains, rapid pulse, elevated temperature, and vomiting of green matter. Dr. Wood found the tumor changed to the *left* iliac region, and diagnosed rotation of the cyst upon the axis of the pedicle, with impending strangulation. Opiates relieved pain. Patient was placed on her right side with hips elevated, and next morning the tumor had resumed its place in the right side. Successful ovariotomy was performed March 18th, assisted by Drs. W. T. Briggs, Ewing, and Wood. The black, pearly color of the cyst walls, with spots of extravasation over its surface, and the cord thickened by the presence of engorged and varicose veins, proved that axial rotation had taken place. In all such cases immediate operation is the only recourse, as otherwise a speedily fatal issue is certain.

Cocaine Dosage and Cocaine Addiction.

Under this title, Dr. J. B. Mattison, of Brooklyn, N. Y., has been doing the objectionable thing of contributing to *several* journals the same article about the same time as an "Original Communication." We are glad our attention was called to the facts in the case in time to save this journal from the infliction of the wrong. It is a thing which authors ought to be ashamed to do—to impose articles upon editors even under the quasi impression that the articles were specially contributed to this or that journal, when in reality the same article is sent to several journals simultaneously without informing the several editors of the facts. In the present case, we credit our valuable exchange, the *North Carolina Medical Journal*, April number, with the article in question. To summarize the article:

Cocaine may be toxic, sometimes deadly, in large doses.

It may give rise to dangerous, or even fatal symptoms, in doses usually deemed safe.

The danger, near and remote, is greatest when given under the skin.

It may produce a diseased condition—in which the will is prostrate and the patient powerless—a true toxic neurosis, more marked and less hopeful than that from alcohol or opium.

Galloping Consumption.

Dr. John Dell'Orto, of New Orleans, begins his paper on this subject (*N. O. Med. and Surg. Jour.*, April, 1887) with the statement that this disease often commences with symptoms of a common cold; subsequently it may resemble a specific fever—an enteric fever. Undoubtedly the two diseases have been taken one for the other. Generally, however, about the end of the second week, acute pains in the chest set in, with a peculiar cough, and an excessive dyspnœa indicates something wrong in the passage of the blood through the lungs, impeding oxygenation, etc. As a rule, the temperature wave of acute tuberculosis is less regular, and not so high, and the remissions are greater than in typhoid fever. Conheim and Mans have discovered tubercles in the choroid, which is said to be pathognomonic. Hence the ophthalmoscope would be a valuable aid to diagnosis. He then reports a case which tends strongly to sustain the theory of contagiousness—the parasitic theory of Koch—as to cause of the disease.

Ophthalmic Practice Notes.

Dr. Henry Dickson-Bruns, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, April, 1887) two cases of *acute circumscribed cyclitis* to show that an acute, circumscribed non-traumatic inflammation of the uveal tract may arise in the ciliary body, to which, under prompt treatment [by atropia], it may be confined; or it may spread, as it probably always does, unless arrested by early treatment, to the iris and the choroid. In neither case did opacity of the vitreous occur. He next reports a case of *amblyopia following sudden discontinuance of accustomed alcoholic stimulant*, probably cured by strychnia hypodermically ($\frac{1}{20}$th grain). The last case is one of *hæmorrhagic neuro-retinitis; incipient atrophy of optic nerves*, in which the dimness of vision was cured after increasing hypodermics of strychnia sulphate from $\frac{1}{40}$th grain to $\frac{1}{30}$th, and then to $\frac{1}{24}$th. Experience has taught the Doctor that the way to use strychnia in such cases is to use it hypodermically, beginning with a small dose of $\frac{1}{40}$th to $\frac{1}{20}$th grain, and pushing it, in two weeks or so, to $\frac{1}{5}$th or $\frac{1}{4}$th grain. The first symptoms of strychnia poisoning to watch for are a sense of fulness in the head, giddiness, uncertainty of gait, and pain in the muscles of the leg.

Epidemics of Dysentery Due to Defective Sewerage.

Dr. W. C. Duncan, Assistant Physician to Kentucky Lunatic Asylum, reports (*Alabama Medical and Surgical Journal*, April, 1887) the occurrence of dysentery as an epidemic in the above-named institution during each of the three successive summers that he has been connected with it, the cause of which he believes to be the defective sewerage of the place. He is of opinion that all epidemics of dysentery are due to a poison originating in human dejecta. The writer gives plates descriptive of the old and improved systems of sewerage. Dr. Duncan completes his article with a systematic study of the pathology, anatomical changes, symptoms, and treatment of diphtheria.

Criminal Abortion.

Dr. J. B. W. Nowlin, of Nashville, Tenn., states (*South. Pract.*, May, 1887) that in thirty-one years of practice, very largely obstetrical, he has never found it necessary to produce abortion. He moralizes upon the enormity of the crime of criminal abortion, especially in the married, and closes with a resolution he wishes the American Medical Association to adopt, expressing its detestation of the crime and criminal.

Acute Aural Catarrh—Vertigo; Facial Paresis; Œdema of Eye-Lid.

Dr. Wm. C. Ayres, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, April, 1887) a case of acute catarrhal inflammation of the middle ear (which is the only part of the ear that has a mucous membrane, and hence the only part that can have catarrh) in a somewhat aged widow. She suffered vertigo—her head continually turning towards her deaf ear. The face was stiff and slightly distorted on the same side, indicating paresis of the facial nerve, The under eye-lid was somewhat œdematous; and she had violent palpitation of the heart. She recovered.

Webbed Fingers, Associated with other Congenital Deformities.

Mr. A. Rocquet, Resident Student in the Service of Dr. F. W. Parham, Charity Hospital, New Orleans, reports (*N. O. Med. and Surg. Jour.*, April, 1887) the case of a boy 12 years old, whose five digits of each hand were united by thick webs of skin, and the fingers were maintained in partial flexion, forming bowl-like palms. An extra nail was developed just where the adjacent fingers touched. The right foot showed the markings of seven toes, and the left eight; but there were simply shallow grooves where interdigital spaces ought to have been. (These deformities are illustrated by drawings.) The alveolar border of the superior maxillary bone was much thicker than normal, and irregular in shape. The pupils were elliptical. The testicles were not in the scrotum. There was also slight hypospadias, and dorsal elongation of the prepuce of a diminutive penis. The number of deformities make the case interesting.

Veratrum Viride in Acute Pneumonia.

Dr. Jas. B. Baird, of Atlanta, remarks (*South. Med. Record*, May, 1887) that when discreetly used, veratrum viride is most trustworthy and effective in suitable cases of pneumonia—especially in the earlier stages. By reducing the heart's excessive, but irritable action, it lessens active lung congestion, prevents nervous exhaustion, and, unlike the lancet, does not waste the blood of the system, and thus saves the tissues from waste. He thinks it oftentimes may abort an attack. He gives 3 to 5 drops of the tincture, with opium, every 3 or 4 hours, so as to maintain the desired reduction in pulse. Stimulants (brandy or whiskey) may be indicated at the same time; they are always indispensable in the negro.

Cause of Reflex Neurosis in Female Diseases.

This is the subject of "some remarks" by Dr. J. T. McColgan in *Southern Practitioner*, May, 1887. He remarks that the size of the sympathetic ganglia is larger, and the ganglionic nerves are "more highly developed" in the female than in the male. Taking up the *vomiting of pregnancy*, he says it is more frequent and persistent in weakly females leading sedentary lives, and in those who become pregnant late in life. *Suppressed menstruation* entails gastric disturbances and derangement of the whole prima via. We find reflex manifestations in all forms of obstructive dysmenorrhœa, subinvolution, hypertrophy, prolapsus uteri, ovarian irritation and tumors, bladder troubles, and hæmorrhoids. The one factor common to all of these is pelvic, passive or venous congestion. This venous, non-oxygenated blood deprives the nerve centres of a portion of their functional activity, causing pain. Quality of blood, and not quantity alone, is the demand upon the blood supply for nerve nutrition and healthfulness.

Periodical Inebriety.

Dr. T. D. Crothers, of Hartford, Conn., reports a case of periodical inebriety (*South. Prac.*, May, 1887) in which the periods recur every 91 days. Every 91 days, no matter where he is or what he may be doing (he is now a travelling temperance lecturer), a strange, nervous trembling comes over him, which is followed by a great thirst for water, and finally for spirits. If he can get spirits or bromide of sodium, and become stupid for a few hours, this feeling will wear away, followed by high fever and great prostration, and in a week or so he is able to go to work again.

Cholera—What Is It?

The late Dr. T. S. Bell, of Louisville, in 1883, wrote that Fort Bellary, on a granite rock 500 feet high, soon became notorious as the only place where cholera was known to develop annually; and yet no case occurred in the plain below, nor at the foot of the hill. But immense masses of decaying vegetable matter were about the camp water-tanks where horses were fed and watered These masses were removed, thorough drainage established, moisture removed, and cleanliness established. From that time to the present (over 30 years) not a case of cholera has occurred there.—*Sonth. Prac.*, May, 1887.

Intubation for Diphtheritic Croup—Recovery.

Dr. Frank Tipton, Selma, Ala., reports (*Ala. Med. and Surg. Journal*, May, 1887) the first successful case of intubation of the larynx by O'Dwyer's method in Alabama. Colored boy, æt 4 years, about to die from dyspnœa due to pseudo-membranous croup. After several unsuccessful efforts to introduce the tube, he at last succeeded, and the relief was immediate and perfect. Removed the tube six days later to see if he could breathe without it. This he could not do, and the Doctor had to insert the tube again. The boy discovered he could best take milk, water, etc., from a nursing-bottle; after this there was no trouble with the fluid diet—the great bug-bear of these cases. The tube was permanently removed on the eleventh day. The tube caused a slight irritation and left a hacking cough. General practitioners should practice the operation of intubation upon willing subjects before attempting it on a patient.

Glaucoma.

Dr. J. A. Cox read an essay (*vide Alabama Medical and Surgical Journal*, May, 1887) on this disease before the Jefferson County Medical Association. He divided the subject into inflammatory and non-inflammatory types. He then proceeds to compile a good resumé of the literature on the disease. Early iridectomy is favored above all other remedies. How it acts in controlling the disease is not known.

Obstructed Urethra—An Unusual Case.

Dr. A. L. Morris, of Lena, Miss. (*South. Prac.*, May, 1887), after a labor, was summoned to the boy baby, who could not "make water." The penis was in a state of constant priapism, and the meatus urinarius was closed by a membrane. This was clipped; no urine flowed, but was drawn off with a catheter. After this, he urinated all right.

Diseases of the Skin.

Dr. Henry Wile (whose death April 11th was a great loss to the profession) completes a course of fourteen lectures on skin diseases in the May number, 1887, of the *Atlanta Medical and Surgical Journal.* These lectures he intended to publish in book form. His last lecture (XIV) gives brief, systematic notes on herpes zoster, miliaria, pompholyx, pemphigus, and lichen ruber which are valuable to those who have no text books on the skin diseases.

Supra-Pubic Lithotomy.

Dr. Rudolph Menger, of San Antonio, Texas (*Daniel's Tex. Medical Journal*, May, 1887), reports a supra-pubic lithotomy performed by Dr. A. Hahn—Drs. P. W. Johns, J. Favre, and the writer assisting. Stone in the bladder had been diagnosed; the prostate was enlarged and cystitis existed. The incision was made in the linea alba and went under the peritoneum. The bladder was secured with several cat-gut ligatures. The stone was a large mulberry one. The operation occupied about five hours—nearly three hours being consumed in getting patient under ether. This case is believed to be the first supra-pubic operation in Texas.

Treatment of Hyperopia.

We find in *Progress*, May, 1887, an article on this subject by Dr. E Landolt, of Paris. We cannot change the form of the eye, but we have an effective palliative remedy in convex lenses, judiciously selected; but if injudiciously selected, they may do harm. He gives no directions, however, as to how to select glasses.

Progress and Development of Medical Science.

The address of Dr. Hunter McGuire, of Richmond, Va., delivered in April before the Alumni of Jefferson Medical College, which has been highly commended by those who heard it delivered and read it in print, and which was published in full in the May number of the *Virginia Medical Monthly*, likewise appears, by agreement with the editors, in the May number of the *New Orleans Medical and Surgical Journal* and of the *College and Clinical Record.*

Hydrocyanate of Iron in Epilepsy and Neuralgias.

Dr. G. W. Baylor, of Milltown, Ind., says (*Southwestern Medical Gazette*, May, 1887) his attention was first called to this remedy in epilepsy by an article by Professor D. S. Gugin, of Iowa Medical College, in 1872, who cited permanent cures by its use. Having a suitable case on hand, he obtained a supply, and prescribed—

℞. Iron hydrocyanate..... ʒj
Powdered valerian..... ʒij
M. Make 120 pills. S.: One three times daily after meals.

The dose was gradually increased, so that in three months the young man was taking eight grains of the iron a day

and he was greatly improved. The fits, which had been frequent and severe, had entirely ceased, but the patient died six months later from an intercurrent disease. It has the great advantage over the bromides, that, besides controlling the paroxysms better, it does not impair the general health. He has since used the drug, always with benefit, and has cured about half the cases of epilepsy treated with it.

It is excellent also in neuralgias. It exerts a powerful influence over uterine functions. When combined with extract of belladonna, he knows of no remedy better to relieve congestive dysmenorrhœa, or irritation of the ovaries, when of neuralgic character.

Relation of Chronic Nasal Catarrh to Phthisis Asthma, etc.

Dr. F. Walter Porcher, of Charleston, S. C., states (*N. C. Med. Jour.*, May, 1887) that phthisis and asthma begin as cold, and the attacks are frequent, followed by laryngeal inflammation, becoming more and more chronic; the tissue over the turbinated bones becomes hypertrophied, with deviations of the septum and development of exostoses, polypi or adenomata of pharyngeal vault. The inflammation gradually extends to the larynx, marked by hoarseness, cough or pain. This inflammation invariably begins in the nose. It is only recently that we have been shown the serious importance of chronic nasal enlargements, etc. The removal of these enlargements, polypi, etc., generally radically cure hay asthma, chronic laryngitis, etc. Bettman, of Chicago, even says that numerous diseases of the eyes and lids are attributable to "changes in the nose," curable by the electro-cautery. The specially "sensitive area" "exists at the anterior part of the nasal cavity in the angle forming the boundary of the vestibule." These facts point to the value of checking the progress of acute laryngitis. When chronic laryngitis exists, its extent is in proportion to the degree of purulence of the discharges. Purely mucoid secretions are harmless; but muco-purulent or purulent discharges are followed by frequent erosions, which cause hoarseness, cough, expectoration, and phthisis may well be suspected. When hypertrophic rhinitis is sufficient to prevent nasal breathing, the consequent oral breathing allows unwarmed air to pass directly into the lungs and thus acts as another irritant. Hypertrophied nasal tissue, deviated septa, etc., cause the retained mucus to become perverted, more acrid and thus irritant in quality. Deviated septa are more or less hereditary. Dr. Porcher then details two cases of chronic laryngitis as the

beginning stage of phthisis, which being relieved, the phthisical signs disappeared.

In regard to asthma as caused by nasal growths, etc., Dr. Porcher first quotes authorities to sustain his view, and then reports two cases in his own practice to confirm the opinion.

Foreign Bodies in the Ear.

Dr. Richard H. Lewis, of Raleigh, N. C., read a paper on this subject before the Medical Society of North Carolina, 1887, of which we regret not receiving a synopsis in time for our May No. It is published in the *North Carolina Medical Journal*, May, 1887. The following are the four leading facts the writer wishes to impress most forcibly: First, establish with certainty the presence of a foreign body; second, thoroughly exhaust the resources of the syringe and water before resorting to instruments; third, he objects to the use of forceps; and, fourth, the danger of doing too much in the way of manipulations, etc. The writer states that very little reliance should be placed on what the patient may say, and that the only positive evidence we can have of the presence of a foreign body is to see it. This is best accomplished by straightening the meatus, by firmly pulling the auricle upwards, backwards and outwards, and illuminating by reflected light. The nozzle of the syringe should be quite small, so as to concentrate the force of the jet as much as possible, and the stream should be directed against the wall of the meatus close to the foreign body. The upper wall should first be tried; then the others in turn. If this fails, moisten the end of a clean stick with glue, apply it to the foreign body, holding it steady till dry, when upon withdrawing the stick the body will be extracted; if not, he next resorts to instruments. The author states his objections to the forceps as follows: The bodies commonly found in the aural canal are usually more or less spherical, are nearly always too hard for the teeth of the forceps to engage upon their surface, and are nearly always so large that it is impossible to find room for both blades of the forceps between the body and the walls of the meatus, so that when the forceps are closed, the teeth, instead of falling on the opposite ends of a diameter, impinge upon the convexity of the outer half. The substance being too hard for them to take hold, they slip off, and as a consequence the object is pushed further in. The instrument that the Doctor considers most effective is the vectis, or a hook of some kind. A full description of many of the different instruments of different inventors is

then given by Dr. Lewis. In conclusion, he states that the presence of a foreign body in the meatus is not as serious as is often thought, and that if one entertains doubt as to his ability to relieve, it is safer not to interfere—or at least not to be too hasty, as objects have remained in the meatus and been safely removed after two years, and in one instance Politzer removed a piece of slate pencil which had lain in the meatus of an old man for fifty years.

Malignant Endocarditis.

Dr. J. H. Musser, of Philadelphia, Pa., reports two cases in *Progress*, (May, 1887), of idiopathic malignant endocarditis. Before the cardiac murmur was detected, he could only say that he had to do with a septic process. The patients were young adults (man, aged 23, and female, aged 27), previously healthy. An irregular fever developed with profuse sweats and extreme exhaustion, accompanied by vomiting, diarrhœa, splenic enlargement, and acute inflammation of the kidneys, without dropsy, and the physical signs of endocardial inflammation. Pronounced capillary hæmorrhages appeared in the skin and mucous membranes, terminating in suffusion of the skin, conjunctivæ, mucous membranes, with mild but ominous hue of icterus. The use of quinia without result, the irregularity of the fever, the frequent pulse, the extreme sweats and diarrhœa dismissed malaria from diagnosis. The characteristic spots, tympany, peculiar features of tongue, and stools of typhoid fever were wanting; and at no time were the mental faculties dull or wandering. The disappearance of all lung affection, the absence of hurried respiration and of the tubercle bacilli in the discharges caused diagnosis of tuberculosis to be excluded. All the signs and symptoms plainly pointed to malignant endocarditis of the pyæmic type. The anæmia was profound. Over the mitral orifice, at first there was a systolic murmur, *varying* in loudness and in pitch. Later, it diminished in pitch and volume, and at the same time, a very loud systolic murmur, attended with a thrill, high in pitch and grinding in character, was heard over the third left rib and in the second left interspace, one and one-half inch outside the sternum. So loud was this murmur that at first it was thought the pulmonary valves were implicated. Mitral stenosis was finally diagnosed as the heart lesion.

Vesico-Vaginal Fistula Operation Without an Anæsthetic.

Dr. E. S. Ashe, of Wadesboro, N. C., reports (*N. C. Med. Jour.*, May, 1887) an operation of this kind done with suc-

cess, claiming that it was done "without an anæsthetic," when in fact he gave the patient a *quarter of a pint of brandy* by the mouth, and a *quarter of a grain of sulphate of morphia hypodermically* at the same time to prepare her for the operation. *In this section* of the country so much brandy generally makes "dead drunk" come, and so much morphia hypodermically usually makes a person sleep soundly.

Intestinal Worms

Was the subject of a recent lecture by Dr. Wm. B. Atkinson, of Philadelphia, delivered at the Medico-Chirurgical College of Philadelphia, and reported in the May No., 1886, of *Progress*. He commences by denying to worms their frequent great causative relation to numerous other diseases that writers, even up to a few years ago, attributed to them. Of the several varieties of intestinal worms, five are of particular importance to physicians. Three possess an alimentary canal, and are known as hollow worms. Descriptions are then given of these three: the tricocephalus dispar, whip or long thread worm; the common ascaris lumbricoides or earth worm; and the ascaris vermicularis or oxyuris, or small thread, or seat worm. The chief one of the two solid worms, which possess no alimentary canal, is the tænia solium or long tape worm. But a positive diagnosis of worms as causing nervous and other disturbances cannot be made except by seeing the worms expelled. The lecture closes with the usual recommendations of spigelia, senna, santonin, oil of turpentine, worm-seed oil, etc., for the intestinal ascarides, while enemata of tincture of assafœtida, lime water, solution of lime water, etc., are used for seat worms. For tape worm he says the best remedy is the "oil of neale from" [evidently misprint for male fern] in doses of 30 to 60 drops of the fluid extract, in mucilage—the patient fasting for the time.

Uterine Hæmorrhage Probably Malarial.

Dr. W. F. Potter, of Wilmington, N. C., reports (*N. C. Med. Jour.*, May, 1887) the case of a woman from a malarial section, in whom, from three to five months after the birth of her third child, regularly every two weeks, beginning about 3 o'clock, uterine hæmorrhages came on, not arrested by ergot, opium, elixir of vitriol internally, nor by injections of sugar of lead in alum solutions. Quinine in ℈ij. doses every twenty-four hours, beginning to administer it five days before the expected returns, with rest in bed, completely arrested the pain and hæmorrhage.

Absence of Uterus.

Dr. J. H. Ferris, Henrietta, Texas, reports (*Texas Cour. Rec. Med.*, May, 1887) the case of Mrs. H., age twenty, who was poorly developed, had never had the slightest symptom of menstruation, had been married two years, and who, August 1st, 1885, sought the doctor's advice in consequence of failure in coition. An examination revealed an entire absence of the vagina, and, per rectum, no indication of the uterus. External organs were well developed. On August 13th the doctor operated. With a steel sound in the bladder, held by an assistant, whose index finger of the right hand was introduced into the rectum, and the patient on her back, an incision about an inch and a quarter long and one-eighth of an inch deep, was made at the bottom of the sulcus between the labia; the cellular tissue was then lacerated with the finger-nail to the depth of four inches, high up in the pelvis. The thick transverse band passing around from ovary to ovary, was distinctly felt, but being unable to feel even so much as a rudimentary uterus, the doctor discontinued the operation. Cellulitis set up, preventing the use of the plug, in consequence of which the artificial opening closed completely. Recovery was slow.

Atropia and Eserine in Synechiæ Posterior.

In a previous article (*Tex. Cour. Rec. Med.*, April, 1887), R. H. C. speaks of using *without authority* the above named remedies alternately for the breaking up of adhesions after neglected iritis. In reply, Dr. R. C. Hodges states (same *Journal*, May, 1887) that it is an established practice, and that R. H. C. might as well claim to use *without authority* mercury in syphilis.

Management of the Second Stage of Labor.

Dr. J. T. Wilson, Sherman, Texas, (*Texas Cour. Rec. Med.*, May, 1887) begins an article on the above named subject, a full synopsis of which will be given when the article is concluded.

Endosmosis.

Dr. Ephraim Cutter, of New York, publishes in the *Alabama Medical and Surgical Journal*, May, 1887, "An Inaugural Thesis" on endosmosis, written in 1856. It serves to this day as a very good review of the subject. It is to be concluded in the June No. of the above-named *Journal*.

Book Notices.

A Practical Treatise on Obstetrics. Vol. II. (4 vols), *The Pathology of Pregnancy.* By A. CHARPENTIER, Paris, M. D. Illustrated with Lithographic Plates and Wood Engravings. This is also Vol. II. of the "*Cyclopædia of Obstetrics and Gynæcology*" (12 vols), issued monthly during 1887. New York: William Wood & Company.

This is an excellent work, and this second volume alone would fully compensate even the "old practitioner" if he were to read and study every page of it. If not so many new things, he would learn a great deal that he has not known before. By the title, "Pathology of Pregnancy," the author means the *diseases* of pregnancy. The table of contents even is too full to allow of transcription. The first two chapters are taken up with such diseases of the mother as epidemic diseases, colic, cholera, the fevers, pneumonia, tuberculosis, icterus, syphilis, lead and tobacco poisoning, hysteria, epilepsy, traumatism, goitre, erosions of the cervix, lesions of digestion, respiration, circulation, secretions and excretions, pelvic joints, vulva, vagina, and uterus, as well as eclampsia, paralysis, etc. Chapter III. considers diseases of the ovum, decidua, placenta, and amnion. Chapter IV. is devoted to diseases of the fœtus. Miscarriage is the title of Chapter V., and Chapter VI. is taken up with extra-uterine pregnancy. The translation is first-rate, and the American editor's notes are practical and very valuable to the work.

Aphorisms in Diseases of the Rectum. By W. E. RYAN, M. D. Baltimore: Press of Isaac Friedenwald. 1886. Large 12mo. Pp. 102. Cloth. Price $2. (From Author; P. O., New Albany, Ind.)

We would not be without this little book for a great deal more than its price. It is what every practitioner needs in this day, when quacks and charlatans have been quietly busy making their notes from the many paragraphs contributed by worthy authorities to medical journals, compiling them into systematic papers for purely personal information, and practising the lessons thus learned with a success that "sets the surgeon on the shelf." It cannot be denied that the results of treatment by many, if not most, of these "pile doctors" have equalled, if they have not been more favorable than the old methods by the knife, ecraseur or ligature. Most of their methods, too, possess the advantage of not being painful; whereas the methods of the surgeons of the text-

books, for the most part, require chloroform, or else cause pain. Dr. Ryan, in his book, presents a condensed statement of the best means known to date for the treatment of rectal diseases, mostly without anæsthetics, the knife, or the ligature. The diseases treated of are hæmorrhoids, fistulæ, fissure, rectal ulceration, prolapsus, hæmorrhage from the rectum, polypi recti, stricture, etc. We feel that we know more since reading the book than we did before. We commend it to our readers as being compiled by a reliable investigator and an eminently successful practitioner in this line of special practice.

Practical Lessons in Nursing. Maternity, Infancy, Childhood. By JOHN M. KEATING, M. D., Visiting Obstetrician, and Lecturer on the Diseases of Women and Children, Philadelphia Hospital, etc. Philadelphia: J. B. Lippincott & Co., 1887. Extra cloth, 12mo., pp. 221. Price $1. (For sale by West, Johnston & Co., Richmond.)

This is the very book doctors have long been waiting to place in the hands of their intelligent patients who are mothers, or to recommend to those who undertake nursing of females and children. It is, as the title claims for it, "adapted especially to the use of mothers or those entrusted with the bringing up of infants and children, and training schools for nurses, as an aid to the teaching of the nursing of women." It includes the hygiene of pregnancy, the nursing and weaning of infants, and the care of children in health and disease. The style is plain and practical, and the directions or advices are just such as the family physician would give. The book, if properly placed in the hands of patients, will prove a great help to the intelligent doctor. We cordially recommend it.

Practical Treatise on Impotence, Sterility and Allied Disorders of Male Sexual Organs. By SAMUEL W. GROSS, A. M., M. D., L. L. D., Professor Principles of Surgery and Clinical Surgery, Jefferson Medical College of Philadelphia, etc. Third edition, thoroughly revised. With 16 illustrations. Philadelphia: Lea Brothers & Co., 1887. Cloth, 8vo., pp. 172.

There is scarcely any class of affections which gives men so much concern as the premature decay of the virile powers. They have a prurience for literature on the subject, and even read every trashy quack advertisement that relates to the matter that drops in their way. The regular profession undoubtedly has been too negligent in its study of the causes and treatment of the various conditions which lead to im-

potence; so that a review of most of the prescriptions are amusingly dogmatic and trivial. Damiana is a good sexual tonic—there is no question about that; but it is not good for derangements due to organic lesions. Strychnia and phosphorus and electric stimulants have their excellent effect in suitable cases. And doctors empirically run to one or the other, or a combination of these without regard for the cause of the impotence or sterility complained of, when in reality it often happens that, instead of such things, *rest and sedatives* are the needed remedies. The book now before us tells about all these things in such a plain, matter of fact, sensible manner that we wish we could induce every practitioner to purchase and study attentively every lesson in it. It is what is needed by the doctor—whether as physician or surgeon.

Text-Book of Pathological Anatomy and Pathogenesis. By ERNEST ZIEGLER, Professor of Pathological Anatomy in University of Tübingen. Translated and Edited for English Students by DONALD MACALLISTER, M. A., M. D., F. R. C. P., etc. Three Parts Complete in One Volume. New York: Wm. Wood & Co., 1887. Cloth; 8vo.; pp. 1091.

The records in this book are mostly of facts rather than of theory. The author has wisely considered it best for the student who is to use this as a text-book, and for practitioners who use it as a reference book, to omit theoretical discussions almost altogether. Hence whoever makes use of this work makes use of *authority*. Some parts of the book have almost the value of a treatise on diagnosis. Tumors and parasites are two chapters of special practical interest. But all is so excellent that it would be hard to affirm which section is best. The pathology of nearly all the more common diseases is well given, and as a companion for good text-books on Practice of Medicine and Practice of Surgery it has no equal in the English language. Full tables of contents and an excellent index serve as valuable helps to look up any given subject. The translation has been done admirably well, and the editorial notes are complete, so far as the intentional range of the author is concerned.

Earth as a Topical Application in Surgery. By ADINELL HEWSON, M. D. Second Edition. With four Photo-Relief Illustrations. Philadelphia: Medical Register Co., 1887. Demi 8vo.; pp. 309; cloth. Price $1.

We congratulate the *Medical Register Co.* in its new *rolè* of publisher, and in the good selection of a practical work to

start off with. This book gives a full exposition of the use of earth, in all the cases requiring topical applications, in the surgical wards of Pennsylvania Hospital during six months in 1869. It is practically a reprint of the first edition (of 1872). Observations since then have not led the author to make any change of statement or opinion. The earth he first used was taken from a heap in the hospital lot, left there from the excavation for a new lecture-room, which was well dried and finely sifted. This earth was rich in yellow clay. Its application to a wound most thoroughly disinfected it, and the wound healed remarkably nicely. Other experiments followed, and he developed the fact that it was useful also in reducing fibroid tumors. From time to time, different observers have confirmed all the claims of the author, but for some reason it has not come into common use—perhaps it is too simple. Dr. Graham, of Charlotte, in the proceedings of the North Carolina Medical Society (see our May No., 1887), has had good results with it; and in one case of fibroid of the uterus the editor of this journal has recently had very encouraging results from the application of the "mineral earth" of a late Baltimore firm. Other practitioners in Richmond have used it in gynæcology and surgery; but, singularly, all seem still to use it as an experiment, although the reported results are good. One great drawback to the book of Dr. Hewson, as now published, is the *absence of an index.* In this day, when a moment of time is often a matter of great value, the most important discovery that does not help to economize time is not made use of. Hence, until Dr. Hewson's book (which is an excellent one) gets an index, it will not be referred to as often as it should be by practitioners.

Medical Electricity. By ROBERTS BARTHOLOW, A. M., M. D., L.L. D., Professor of Materia Medica, General Therapeutics, &c., Jefferson Medical College of Philadelphia. Third edition, enlarged and improved, with 110 illustrations. Philadelphia: Lea Brothers & Co., 1887. Cloth. 8vo.; pp. 304.

This "practical treatise on the applications of electricity to medicine and surgery" has grown to be so important a work that every practitioner should read it—especially when it is recalled what possibilities lie in the path of the further study of the therapeutics of electricity. Dr. Bartholow has here presented the profession with a concise work that, beginning with elementary descriptions and principles, gradually grows, page by page, into a magnificently practical trea-

tise, describing operations in detail, and giving records of successes that prove electricity to be marvellous as a curative agent in many forms of disease. The great drawback to the general resort of physicians to electricity consists simply in the expense of batteries, etc. The tendency is to make these much cheaper. When the price of the apparatus comes within the reach of the purchase of the poorly paid practitioner, then we will find that larger and frequent editions of such an excellent book as this will be demanded. The doctor cannot now do better than to possess himself of Dr. Bartholow's "Treatise"—just as it is.

Elementary Microscopical Technology. A Manual for Students of Microscopy. In Three Parts. Part I. By FRANK L. JAMES, Ph. D., M. D., President St. Louis Society of Microscopists, Etc., St. Louis, Mo. St. Louis Medical and Surgical Journal Company. 1887. Cloth, 8vo. Pp. 107. (From Publishers.)

The author has done a great service to the student beginning the subject of microscopy in preparing this manual. It gives directions so plainly that it seems to us it would be more difficult to err than to learn what to do with a slide. This Part I gives "the technical history of a slide" from the selection of the crude material up to the minutest details of the finished mount, ready for the cabinet. It takes nothing in the way of information about the microscope as granted. It tells in plain language what materials to get, etc. It calls "scissors," *scissors*, etc. If the two parts that follow are as excellent in their plain, practical details as Part I is, then the completed work will be an *essential* to students of either general or technical microscopy.

Elements of Botany, including Organography, Vegetable Histology, Vegetable Physiology and Vegetable Taxonomy, and a Glossary of Botanical Terms. Illustrated by nearly Five Hundred Engravings from Drawings by the Author. By EDSON S. BASTIN, A. M., F. R. M. S., Professor of Botany, Materia Medica and Microscopy, in the Chicago College of Pharmacy. Chicago. G. P. Engelhard & Company. 1887. Cloth, octavo. 300 pages. Price, $2.50. (From Publishers.)

We give the unabbreviated title, because it precisely represents the scope of the work. It presents the *elements of botany* so well that one may become his own teacher, by adopting it as a text-book. To the country practitioner it is very useful; for it has become a custom often for the country people to depend greatly upon their doctor for the selec-

tion of indigenous medicines, and even to make selections of flowers, plants, etc., for the purposes of ornamentation. The druggist, too, should be a botanist; for he is often called upon to select the right from a mass of plants of doubtful character. The young lady and the housewife can become familiar with their plants by acquainting themselves with the facts in this book. It is a good text-book, and we recommend it.

A Practical Treatise on Obstetrics. Vol. III (4 vols.), **The Pathology of Labor.** By A. CHARPENTIER, M. D., Paris. Illustrated with Lithographic Plates and Wood Engravings. This is also Vol. III of the "Cyclopedia of Obstetrics and Gynæcology" (12 vols.), Issued Monthly during 1887. New York. William Wood & Company. Price of the set, $16.50.

The first 249 pages of this octavo are devoted to dystocia of maternal origin; the succeeding 86 pages are taken up with dystocia due to the fœtus; the concluding 13 pages speak only of ergot and its uses. The work is simply invaluable to general practitioners, while it well serves as a good consultation book for the medical student. There is scarcely a useless line printed. Dr. Charpentier goes straight to his subject, describes accurately whatever he may be considering, and suggests such management of difficult labor and advises such a line of therapeutics as is apt to prove most effectual. The volume is nicely issued from the press, and is very cheap at the price for it, named in the title.

The Practitioner's Hand-Book of Treatment. By J. MILNER FOTHERGILL, M. D., Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, etc. Third American, from Third English Edition. Philadelphia. Lea Brothers & Co. 1887. 8vo. Pp 660. (From Publishers.)

This is a wonderful book. If there be any such thing as "medicine made easy," this is the work to accomplish that result. It imparts information so agreeably—so smoothly—that the reader almost thinks, as he lays the book down, that he "knew that before," when, in reality he did not know anything scarcely, or else he could not before reconcile facts which now became clear as daylight. The author gives "*the principles of Therapeutics*," the study of which will give great vantage to the physician. The added chapters in this third edition, not found in previous issues, are on "The Dietary in Acute Disease and Malassimilation," and "The Management of Convalescence."

Editorial.

Hydrophobia—A Case—Reprehensible Conduct.

Mr. Garnett, a gentleman living near this city, early in February of this year was severely bitten on the hand and arm by a mare. The horse had been bitten several days previously by a setter dog presumed to be rabid, and the horse was believed at the time of the accident to be suffering from hydrophobia. Soon after biting Mr. Garnett, the horse fell into convulsions having somewhat the characteristics of tetanus. The horse had been brought to this city to be placed under the care of the distinguished veterinary surgeon of this city, Dr. Wm. H. Harbaugh. He was near by Mr. Garnett when he was bitten. The doctor at once took him to a hydrant near by, and after washing his wounds well, got him to suck them, which he afterwards cauterized. Naturally Mr. G. became nervous and very much alarmed as to his future. Dr. Harbaugh, to give him the benefit of the treatment, poo-poohed the idea of his having after-effects in the form of hydrophobia. The patient's anxiety, however, caused him to seek the surgical advice of Dr. Hunter McGuire, who likewise encouraged him not to fear hydrophobia. Except the slight suffering from the wounds of the bite, Mr. Garnett, under usual surgical dressings and a good deal of verbal encouragement from his doctors, made a speedy recovery. He had confidence in his medical adviser here.

But on the 16th of February, while still in the anxious state of mind, and under as able medical advice as can be furnished anywhere, he received an unsolicited letter, of which the following is a verbatim copy:

"62 MADISON AVENUE, NEW YORK, February 15, 1887.

Dear Sir:

I read in the New York Herald of to-day that you had been bitten by a mare supposed to have had rabies, communicated by a setter dog of yours, which died under suspicious circumstances.

You are probably aware of the existence of an Institute in this city similar to the one in Paris for inoculation as a preventative of rabies, if not, I feel it my duty to inform you that we have inoculated quite a number of persons who had been bitten by rabid dogs, and so far every case has proved successful in preventing the disease developing in the human being. I do not write with a view of inducing you to come here for that purpose to make money out of you, *as we do not charge for the treatment*, and have no money interest in it, but a desire to do good.

Of course there is a limit to the time that a patient can wait after being bitten, and that is 13 or 14 days, after that it is less certain.

Respectfully yours, ALEXANDER B. MOTT, M. D.

President American Pasteur Institute, N. Y."

Such a letter coming unsolicited from the Professor of Surgery in Bellevue Hospital Medical College of New York to the patient of another practitioner of equal repute with himself, is professional arrogance in the extreme; and in direct opposition to the Code of Ethics of the American profession. But leaving aside the unprofessional question, had the patient at the time known who Dr. Mott was—that he is really an eminent Professor of Surgery in a prominent college of the country, instead of a quack or a charlatan—the probability is that the nervous impression would have been so great as to have caused the development of the so-called hydrophobia and death.

We would not expose this personal letter were it not from the fact that the author attaches his official title and makes his letter sensational in character. In all probability he has sent like letters to other parts of the country, and possibly caused needless local sensations, and done harm. We trust such conduct will be rebuked—especially when found in those eminent in the profession.

Medical Examining Board of Virginia.

Dr. George A. Taber, of Richmond, one of the five homœopathic members of the Medical Examining Board of Virginia, deserves thanks for correcting in the *Hahnemannian Monthly* for May, some errors which had been published in that journal. He makes a review of the transactions of the Board since its organization, two years ago, up to April, 1887. He states that 138 individuals, from various institutions, representing 12 States, besides under-graduates, have been examined, and that the total rejections amount to a trifle over 20 per cent. The rejections, calculated by State institutions, have been as follows: District of Columbia (colored) and Ohio, each 100 per cent.; Maryland, 29.7 per cent; Kentucky, 20 per cent; Virginia, 10.16 per cent; Pennsylvania, 10 per cent; non-graduates, 75 per cent. All graduates from colleges in New York, Michigan, Tennessee, Missouri, North Carolina (colored), and Germany have passed satisfactorily. Only two homœopaths have appeared before the Board, and they passed. If the above official figures do not show that the Virginia Board is interested in building up the credit of institutions turning out the best material, then it is useless to resort to figures to demonstrate a mathematical calculation. He then points out five errors in five consecutive statements in the *Hahnemannian*, on which the charge of dishonesty forms the basis of an editorial.

Some of the other journals, notably the *Medical Register*, in reviewing the recently published results of the late examinations, fall into the error of condemning the Virginia medical colleges, when in reality not a single applicant who has yet come before the Board with the diploma of the *Medical Department of the University of Virginia* has ever failed to pass a satisfactory examination. There are, indeed, few such medical schools in the country as the University of Virginia, if it is intended to compare the thoroughness of medical education of its grrduates with those of any other State or country. To be a graduate of medicine under the present Faculty of the University is indeed a distinguished honor. And it is to be hoped that in future references by our exchanges to the number of rejections of graduates of the Virginia medical colleges, a distinct explanatory remark of exception as to the University of Virginia will be made. That institution is the pride of every Virginian and Southron.

State Society Sessions.

During April and May several of the Southern State Medical Societies held their annual sessions.

The *North Carolina* Society proceedings were reported in good part in our May issue, with lists of officers, etc.

The 38th session of the *Georgia* Association was held in Atlanta, April 20th. Dr. A. G. Whitehead, of Waynesboro, was elected President for the ensuing term, and Dr. James A. Gray, of Atlanta, Secretary. The next meeting will be in Rome, Ga., beginning the third Wednesday of April, 1888. An interesting discussion occurred on the alcohol question, Drs. J. P. Logan, of Atlanta, and Eugene Foster, of Augusta, being the leaders. While we strongly advocate the temperance views, we cannot think that Dr. Logan offers a fair challenge in demanding that it "be *proved*" that alcohol "has ever saved a single life." The same manifest impossibility of scientifically satisfying such a challenge would exist in the demand to *prove* that prayer has done physical good; but in this Christian age few of us are so skeptical as to deny or doubt the efficacy of prayer.

The *Alabama* Association convened in Tuscaloosa, April 12–15.

The 54th session of the *Tennessee* Society was held in Nashville, April 12–14. By resolution, it voted $100, and the members present contributed $150, in addition—total, $250—to be sent as a contribution to help defray the ex-

penses of the International Medical Congress. Dr. P. D. Sims, of Chattanooga, was elected President, and Dr. Ambrose Morrison, of Nashville, Secretary. Place of next annual session (April, 1888), Knoxville. No paper can hereafter be presented requiring more than twenty minutes for reading. Dr. Thomas Lipscomb, of Shelbyville, is the sole survivor of the 114 charter members in 1830.

The 19th session of the *Texas* Association, under an evident typographical error in *Daniel's Medical Journal*, copied also in *Progress*, is said to have been held in Austin, *June* 26–29; it should be April. It seems at times to have been a little stormy—several charges of violating the Code having been preferred against different members, some of whom were expelled, and others had to fight their way to victory. One used such expressions, in refutation of charges, as "blood-thirsty demand for revenge," "as false as h—l," etc. It must have been "mighty" hot down there. Dr. Sam'l R. Burroughs, of Raymond, is President-elect, and Dr. F. E. Daniel, of Austin, Secretary. The next session is to be in Galveston.

The *Mississippi* Association met in Jackson, April 20th. It was appreciated as an unusually good meeting. Dr. L. N. Guice, of Natchez, was elected President for the ensuing term, and Dr. Wm. E. Todd, of Clinton, Secretary.

The 9th session of the *Louisiana* Society was held in Alexandria in April. Dr. Joseph Jones, of New Orleans, is President-elect, and Dr. P. B. McCutchon, of New Orleans, Secretary. Only 40 members were in attendance during the session, and only 16 new members were added from the great State of Louisiana. The next session is to be in April, 1888, at Monroe.

Dr. A. Trent Clark,

Of South Boston, Halifax Co., Va. (during the session of the Executive Committee of the Medical Society of Virginia, held May 14th, 1887, in the office of the Chairman, Dr. Wm. W. Parker, of Richmond, Va.), was duly nominated as a *member of the Medical Examining Board of the State of Virginia* from the Sixth Congressional District, to fill the vacancy caused by the resignation of Dr. Harvey Black, who has moved out of the said district to Marion, Smyth Co., Va., to take charge of the Southwestern [Va.] Lunatic Asylum. We are glad to learn that Gov. Fitzhugh Lee has issued the commission in due form, and that Dr. Clark will enter at once upon the discharge of his duties. He enters the Board to fill the unexpired term of Virginia's

choicest physician. We have every reason to believe that Dr. Clark will prove a worthy successor.

Dr. Robert T. Wilson,

Of Baltimore, Md., will start on a three months' pleasure European trip during the latter part of this month. He proposes to visit some of the prominent hospitals, and attend some of the medical societies of Europe during his absence.

Relations Between Doctor and Druggist.

We feel it to be scarcely less than a duty to call special attention to the article in this issue, on this subject, by Dr. Edward A. Craighill, of Lynchburg, Va., in order that we may specially commend its careful reading to every one of our subscribers. After they have read it, they should lend their copies of the journal to their druggist acquaintances, and get them also to read it. The article is as good for practitioners and druggists in one State as another. We do not know that we have ever seen a fairer and a more commendable solution of some of the vexed and vexing questions that are constantly arising in different towns and cities between physicians and the apothecaries. We would adopt the whole of this article as an editorial if it were necessary to give it more weight. A personal acquaintance with and friendship for the author enables us to say that he is as exemplary a druggist as we ever knew. Would that all doctors and apothecaries were like him.

Dr. Hunter McGuire

Must record this as indeed his honor year. Some two months ago he had to deliver the address before Alumni Association of Jefferson Medical College in Philadelphia. Last month he presided in Washington as President of the American Surgical Association. And now, on June 3rd, the Raleigh *News and Observer* records that the University of North Carolina has just conferred on him the title of LL. D. What next?

Dr. J. F. Winn,

Editor of that brilliant and excellent medical monthly of our city, *Practice*, we regret to say was quite severely bruised and cut about the head and body by a runaway accident on May 21st. His readers and ours will be glad to learn, however, that his injuries are not serious to life or body. On

June 6th, he was able to answer a summons to his sick father up the country, where he is detained several days. This combination of circumstances may delay the appearance of the June number of *Practice* for a week or so.

The Hastings Truss Co.

The advertisement of Hastings & Garson (page 26), manufacturers of trusses, surgical bandages, etc., Philadelphia, appears in this number under the name "The Hastings Truss Co.," being a reorganization of the old firm by the infusion of new blood and vigor. The wares of this celebrated factory are known in almost all parts of the civilized world, where improved mechanical appliances for hernia and other kindred ills are known. Their trade in the United States extends from Maine to California. Canada and Nova Scotia are regular contributors to their "order book."

Los Caballeros y las Señoritas of the marts of our neighboring peninsula, such as Rio Janeiro, Buenos Ayres, Santiago, Valparaiso, etc., are familiar, by use, with the goods furnished by this house. They have sent their "missionaries" (read drummers) to these markets, as well as to Australia, Cape Colony and Natal (in Afric's sunny clime), to popularize and take orders for their goods.

Dr. Harry Huzza,

Recently of Atlanta, and a graduate last spring of the Jefferson Medical College of Philadelphia, has been complimented by Dr. Robert Battey, of Rome, Ga., in making him one of his assistants. The *Atlanta Medical Journal* says "he is one of the brightest young men in Georgia." Dr. Battey always had good judgment.

Meeting of the Medical Society of Virginia—1887.

The Executive Committee, at its session, May 14th, selected Wednesday night (at 8 o'clock), October 19th, 1887, as the *time* for the opening of the eighteenth annual session of the Medical Soc ety of Virginia, in Richmond, Va. This selection was made in conformity with the general preference manifested at the last session, that the session of 1887, in Richmond, Va., should be held during the week *immediately preceding* the State Agricultural Fair exhibition.

Married,

Dr. C. L. Cudlipp, the Secretary of the Richmond Medical and Surgical Society, and Miss Pattie R. Riddick, daughter of Rev. Joseph H. Riddick, of Richmond, May 24, 1887.

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Original Communications.

ART. I.—**Remarks on Certain Mutilations and Artificial Deformities.*** (Continued.) **Circumcision.**† By M. A. RUST, M. D., Richmond, Va.

Circumcision ranks with a category of mutilations quite different from the foregoing. It is executed deliberately, and at the same time instinctively, under pressure of the constraining and restraining forces of the social medium, to which the individual, living in that medium, can offer as little resistance as he can to the functions of his organs.

In descanting with unfettered reason upon this mutilation, we are by no means forgetful of the regard which is due to this and kindred acts, by which, in primitive times, the nascent social force coerced the brutish, egoistic impulses to minister, even at the cost of individual pain and injury, to the weal of the inchoate social union. We may behold in these crude and strange acts the embryonic forms of the most exalted social virtues of true humanity—*self-denial—altruism!*

Circumcision is the most ancient and widely-spread mu-

* Read before the Richmond Medical and Surgical Society, May 10, 1887.

† First part, see *Virginia Medical Monthly*, June, 1887.

tilation in existence. It is practiced in all the five parts of the world; to the greatest extent in Asia, Africa, and among the savages of Australia. Of civilized nations, we note about one hundred and thirty millions of Mohammedans, about ten millions of Jews, and the Christians of Abyssinia. It was practiced in Mexico at the time of the Conqeust of Cortez,* and, according to the accounts of modern travelers, is still in use among some Indian tribes in Nicaragua and on the Amazon.

No wonder that the origin of a mutilation, so barbarous, so repulsive, and at the same time so widely-spread, and so tenaciously adhered to, should have repeatedly formed an object of inquiry and speculation. No solution to the problem has been found. The ancient Hebrew literature only contains a mythical tale. Mohammed found circumcision already an ancient usage among many of the Arabian tribes; he took it up for reasons akin to those for which Paul dropped it. It had prevailed, since time immemorial, among the Abyssinians, when they embraced Christianity. Travelers, who make inquiries among the savage tribes, generally obtain for answer that it is a tribal custom which has always been; they cannot conceive why other reasons should be demanded.

Out of the multitude of theories advanced in explanation of the origin of circumcision, we select three as worthy of consideration: (1) Origin founded on religious grounds; (2) On hygienic grounds; and (3) On sexual grounds.

All three theories stand on the same level; the reasons advanced for either of them are neither stronger nor weaker than the reasons for the other two.

(1) *Origin on religious grounds.*—The myths and traditions of the sacred books of the Hebrews point to such an origin. On the other hand, none of the other races and nations who practise circumcision possess such traditions. Rationalists admit the religious origin by postulating circumcision as a substitute for human sacrifices. This view becomes the more plausible as the Hebrew sacred books furnish instances tending to show that human sacrifices were customary among

*Bancroft: *Native Races of America.*

the ancient Semitic tribes, even after they had changed their nomadic mode of life.

The tale in *Exodus*, iv, 24, 25, is of peculiar interest—sublime in its ferocity and conciseness. A wife and mother saves her husband's life from the wrath of a God by swiftly cutting off, as a bloody offering, a piece of her babe's fore-skin. The tale, moreover, stands in no connection with, and is entirely foreign to the rest of the text into which it is introduced, and is evidently derived from a source much older than any other part of the book—possibly from a tradition handed down from the stone age.

But further argumentation is supererogatory, since circumcision did *not* originate with the Hebrews. We meet it as an ancient established usage in Egypt long before the Jew was evolved.

Herodotus, in his immortal historical work, in giving an account of Egypt, which he had visited, speaks of circumcision as an Egyptian custom, prevailing since time immemorial. He has nothing to say about its origin, or purport. All Egyptian male mummies bear vestiges of circumcision.* The penis of such a mummy—a warrior who, according to the sepulchral inscription, lived between 1555 and 1614 before Christ, was brought home by Ebers from Egypt to demonstrate the scar left by the operation. How many thousands of years of Egyptian life preceded this warrior, we are not prepared to tell; but, for anything we know to the contrary, circumcision may be much older than Egyptian nationality. There are also indications pointing to its existence in the stone age.

Be this as it may, circumcision with the Egyptians was no religious act; it was a distinction of caste; the princes, the warriors, the priests and the magi were circumcised—not the common people. No uncircumcised could be initiated into the mysteries of the temple of wisdom; and it is said that Pythagoras, on his visit to Egypt, actuated by his thirst for knowledge, submitted to the operation.

(2) *Origin on hygienic grounds, or grounds of cleanliness and*

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*George Ebers: *Egypten and die Buecher Moses*, and other writings by the same author.

health.—Since Philo Iudæus,* this has been the favorite rationalistic explanation. It is argued that early experience, especially in hot climates, led to the removal or splitting of the foreskin to keep the glans clear from smegma and other impurities, with a view to prevent disease. Now it is a fact that the circumcised millions are not exactly the cleanest millions; and we cannot see why a filthy savage should take so much pains to have a clean penis. Hygienic precautions are not the upshot of a low level of culture, nor is it presumable that an advanced savage of yore should have anticipated Lustgarten's idea of locating the birth-place of bacillus syphiliticus in the *smegma.*

The defenders of the hygienic theory have laid stress on the remarkable frequency of occurrence of the term "*clean*" in some parts of the ancient Hebrew literature, especially in the priestly or Levitical rules and laws; but here the term "*clean*" denotes a peculiar, Levitical tenet, exclusive of all relation to hygiene; it means conformity to Levitic rule. In this peculiar, transcendental sense, the term is used in the phraseology of the time of Christ. Only the circumcised was "*clean;*" the rest of the world "*unclean.*" But even the circumcised, if he ventured to step outside of the Levitical shibboleth, became "*unclean.*" Jesus, though circumcised, was "*unclean.*" He himself could not but use the term in the received transcendental sense; but from his lips it assumed an ennobled, loftier purport; it meant purity of heart, regardless of Levitical rule: "Woe unto you, Pharisee, . . . ye *cleanse* the outside of the cup and of the platter; but your inward part is full of contortion and wickedness." . . . "Thou blind Pharisee, *cleanse* first the inside of the cup, that the outside thereof may become *clean* also." (Luke xi, 39; Matt. xxiii, 25.)

When Antiochus IV, King of Syria, tried, by most tyrannical means indeed, to reform the Jews, it is said, in 1 Maccabees, i, 47, that he wanted "to make their souls abominable with all manner of *uncleanness* and profanation."

That circumcision, in primitive ages, could not have arisen from hygienic considerations, is a conclusion beyond

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* *De Mundi Opificio*, etc. Libri III, Tractatus: *De circumcisione.*

all dispute. But circumcision has been extolled by sundry physicians as a prophylactic against a score of evils, especially syphilis. One of the writers did not even shrink from the preposterous proposition of making it compulsory for the whole male population. Out of the many reasons given, only one deserves consideration—*syphilis.** It is a fact that there is less syphilis among the Jews than among the Christians. But it is *not* a fact that it is circumcision which causes the difference. If there is less syphilis among the circumcised Jews, there is less drunkenness, less dissipation and debauchery, less ruffianism and ribaldry, etc. As for the causes, we must look, not to the prepuce, but to the brain cells. These different moral qualities are the result of the adaptation of brain function to environments. Nearly two thousand years of calamities, of oppression and persecution have rendered the Jew more provident, more temperate, cautious, and guarded. Self-restraint and a greater capability to repress impulses, and to calculate the cost of his acts, are with him hereditary. On the other hand, if in his seed the gemmules which build up the Bluebeard, the murderer, the man with the revolver, etc., are scarce, the gemmules which make the hero and the self-sacrificing patriot are equally rare. Christianization will gradually equalize these inequalities; but then the Christianized Semite, with or without prepuce, will have his full proportional share of syphilis.

(3) *Origin on sexual grounds, or circumcision as a means to promote fertility.*—According to this theory, we must imagine that the prepuce appeared, to the eyes of primitive man, as something which ought not to be where it is—as a thing which stood in the way of the free exercise of the sexual function; and in order to get rid of the encumbrance, slit-

* It is obvious that the circumcised is as exempt from balanitis, balanoposthitis, etc., as he would be from toothache should his teeth be prophylactically extracted. On the other hand, the uncovered penis is more exposed to gonorrhæa. Of the few who have countenanced circumcision, I may quote as worthy of notice:

Hutchinson: On the influence of circumcision in preventing syphilis. London *Med. Times and Gaz.*, Dec., 1855.

A bitter rebuke for the above-mentioned attempts may be found in: *Streubel, Philippica gegen die Beschneideungssucht.* Prager Vierteljahschr, Volume II, 1858.

ting, cutting, crushing and strangling were resorted to. That being so, one must also suppose that originally it was the *presence of phimosis* which prompted the action.

But congenital phimosis, calling for surgical intervention, is of rare occurrence—certainly not of such frequency as to justify the supposition that it was the proximate cause of the custom in question. It is true, the new-born infant generally presents a certain degree of phimosis—that is to say, there are, in the majority of cases, be the prepuce narrow or wide, *adhesions* between its inner surface and the outer surface of the glans, sometimes only at the apex, sometimes extending down to the collum or sulcus retroglandularis. Attempts to draw back the skin are fruitless, and if persisted in, painful to the child. This is not a pathological, but a physiological condition, a continuance of the fœtal condition for a short while longer. It never calls for surgical intervention; in the course of a few weeks or months (sometimes a few years) these adhesions wane and vanish through cornification and exuvation of the respective epithelial layers. Even in those rarer instances, when narrowness of the skin persisted during boyhood, the youngster finds his glans coming out all right at the first erection.

Now, after a little reflection we shall arrive at the conclusion that it cannot be infantile phimosis which lies at the root of the custom of circumcision. Assuredly, the primordial sire was neither physically nor intellectually in a condition to make such nice observations and examinations of the delicate sexual organs of his new-born papoose.

Moreover, infantile circumcision is customary only with a small minority—the Jews. Among the great majority of the nations and tribes who practice circumcision, the performance takes place during boyhood, at or near the period of puberty, when the infantile condition of the prepuce has long ceased to exist. Now, it is precisely the fact of the prevalence of circumcision at the period of puberty which is adduced as a proof of the theory that this performance was instituted as an act of initiation into manhood, as a preparation for the free exercise of the sexual function.

This is the theory of Ploss, who expounds it with ingenuity

and learning.* Passing under review all the usages regarding circumcision, he finds in most of them some points supporting this theory, though he often greatly stretches his points. For instance, a recent traveler (Riegler) relates that he obtained from sundry savage tribes of the Dutch Spice Islands the information that circumcision is performed ad augendam in coitu mulierum voluptatem. In reference to this, Ploss remarks that as one cannot possibly see how the slitting of the prepuce can increase mulierum voluptatem in coitu, the meaning of Riegler's information can only be that the operation serves to satisfy the desire of the women for greater fertility. But without unduly straining their meaning, we might take the words of the savages literally, and find a natural explanation of the exaltation of mulierum voluptatis in coitu, in the consequences of the crude and barbarous methods of circumcision prevailing among those tribes. It would not be contrary to experience to suppose that the rough ways of splitting, tearing, crushing and strangulating, to which the prepuce or parts thereof are subjected, the sloughing and the suppurative processes which follow, may bring about a kind of hypertrophy—a bossy enlargement of the remaining parts—and consequently—to the proud satisfaction of the happy savage—an increase of circumference of the columna adstans inguinibus.

Slitting and ripping of the prepuce is a widely-spread custom, and it varies, as to methods, with almost every tribe. Some tribes go a little deeper into the matter, and slit the urethra also.

The tools used vary as much as the methods; blunt knives, edged pieces of bamboo, stones, shells, etc. With some tribes the prepuce is perforated at the cervix of the glans, a string passed between glans and skin, and knotted; the strangulated portion of the prepuce mortifies. With others, a small staff of wood is inserted between glans and prepuce, a second one outside, both staves being kept firmly in place by means of a clasp, till, through pressure, mortification ensues. Again, a stout piece of wood is forced in be-

* Ploss, *Des Kind in Brauch und Sitte der Voelker.* Item: *Die Knabenbeschaendung. Arch. f. Gesch. de Medicia.* Band VIII.

tween skin and glans, and while the projecting part of the staff is held with one hand, the other, armed with a club or stone, produces, by a vigorous blow, the much coveted solution of continuity. Other tribes insert a piece of wood between prepuce and glans; a longitudinal cut is made on the dorsal surface, close to the corona, through the skin, by means of a shell; the rest of the skin is rent in twain by the fingers, and the split part left swinging. It seems that some savages take a pride in having an appendix, a finger long, hanging down from the inferior part of the virgula virilis.*

Contrariwise, an appendix to the female parts seems to sundry tribes objectionable. It is said that in Nubia, Abyssinia, etc., the girls, at the age of seven years, are circumcised also—to wit., the nymphæ, the prepuce of the clitoris, or the whole clitoris, are cut off.

After wading through such a mire of barbarities, it is refreshing to meet with some curious devices of more human aspect.—*e. g.*, in South Africa,† we come across a kind of hypnotism—viz: the operation is performed with a knife; behind the victim men with rods are ready to administer a whipping should he give the slightest sign of abject fear. It is said that this seldom occurs, preliminary whippings having made the boy understand that business is meant. Again, we may regard it as a dim idea of local anæsthesia when some time before the operation, the boy is made to sit in cold water. And to conclude, we find an anticipation of *Esmarch's* method in the following: The prepuce being drawn up, a ligature is laid around it, close to the head of the glans; a second one, a little way above; the cut is made between the two ligatures—painless and bloodless.

In general, it seems that those tribes, who have learned circumcision from the Mohammedans, do the silly thing in a more sensible and decent manner, the main feature of the Mohammedan method being amputation with a sharp knife (frequently a razor), leaving the glans partially covered.

*Jo. Thomson, through Massai Land, London, 1854, p. 586 (quoted by Ploss), in describing the manner in which the Massai (a tribe in East Africa) perform circumcision, says: "Præputio nempe deorsum de superiore parte penis secto, segmenta utrinque diducta ita componuntur infra, ut in bolum coalescant qui, unum digitum longus, dimidium digitum latus, ab infimo pene pendet."

†*Livingstone's Travels.*

A description of all the various ways in which this mutilation is executed would fill a moderate sized volume. We must refer to the original sources.*

With some tribes and nations circumcision is accompanied by festivities, or by religious or social ceremonies; others do the thing privately; the father circumcises his sons, or the boys do it themselves, or help one another. Obviously they are anxious to do it, as sexual intercourse is only permitted to the circumcised. With the Jews it is coupled with religious ceremonies and an entertainment; the poorest offers wine and cake; the richer a sumptuous repast.

The operative method is decidedly barbarous. The circumciser grasps the prepuce between his fingers, draws it up as far as it will go, secures it with a clamp grazing the the top of the glans, and, giving thanks to Jehovah—the guests joining in—cuts it off close to the clamp. He now seizes with his finger the remaining part of the skin, and pushing it back over the corona, splits and tears off with the long and sharp nails of his thumb the inner lamella. Then he takes a mouthful of wine, and squirting it over the wound, sucks the blood. All this he executes with a facility, skill and rapidity with which no tyro in surgery could keep pace. Barbarous as his method may appear to the scientific eye, he can say, with the poet, "All's well that ends well."

But it does *not always* end well. The operation of phimosis is not one of the simplest operations. It is surrounded by dangers of which the circumciser has not the remotest idea—ignorant, as he is, of the anatomy and physiology of the tissue on which he is operating. There are, in the first place, those adhesions above spoken of. Even when the skin is apparently movable, there may be adhesions near the corona, and when, after cutting, the circumciser takes his leap in the dark, pushing back the remainder of the skin, and tearing with his finger nails the inner lamella, he may

*A galaxy of distinguished ethnologists and travelers in Africa, India and Australia, whose names and the titles of whose writings would fill up several pages. Out of the many we only mention: Livingston, Schweinefurth, Pritchard, etc.; and the Dutch: Wilken, Valentyn, etc.

Of greater works: Authenrieth Ursprung der Beschneidung.

Ploss: Das Kind in Brauch und Sitte der Voelker, both valuable ethnological studies.

Sibree: the great African Island.

unwittingly tear off along with it shreds of the teguments of the glans, causing alarming, often fatal hæmorrhages. It was Prof. Bokay, of Buda-Pest, who, eighteen years ago, by his valuable researches discovered in those adhesions the most frequent cause of bleeding after circumcision.* Abnormal vessels in the prepuce constitute another cause for hæmorrhage; hæmatophilia a third cause. When this last-named affection has been in the family, even in former generations, circumcisions end fatally. The wounded part often becomes the seat of erysipelas, extending downwards over the scrotum and the seat, or upwards to the navel. Mark well the case of two boys (in Cracow), who, after having been circumcised in a house where puerperal fever existed, both became infected with erysipelas.† Phlegmonous processes of the wounded part, often involving the inguinal glands, at times occur; erysipelas gangrenosum, also primary gangrene of the glans have been observed—terminating, in one of the cases, with a loss of the glans and a part of the penis.‡ Trismus and tetanus have appeared;§ it was said, as a consequence of the laceration of the inner lamella; but since the discovery of the microbe of tetanus, one can easily understand that the germs may be conveyed to the wound by the finger-nails of the circumciser. The appearance of diphtheria in the wound of circumcision has been repeatedly observed by Jacobi, of New York, and others. Most of these are evil consequences and calamities for which the circumciser cannot be made responsible. But it often happens that he chips off a thin slice from the apex of the glans; it

* In my long practice I have witnessed, at the request of the parents, a great number of circumcisions, but I do not think much is gained by the presence of a physician. The safety of the operation entirely depends on the skill and dexterity of the circumciser. His is a ritual surgery, which does not admit of interference on the part of the physician. In some instances, when the adhesions were strong, I loosened them by means of a smooth probe, or had the operation suspended. In one case, in which the brim of the prepuce was so firmly agglutinated to the apex of the glans that lateral traction on the skin caused the lips of the meatus to open, we had to wait two months—probing at intervals—till the adhesions were sufficiently loosened. The ordinary, slighter adhesions the circumciser disposes of automatically, by moving the skin up and down several times. I have treated a number of cases of consecutive suppuration and phlegmonous inflammation, but never witnessed an accident like those awful ones quoted on the next page.

† Jafiè, Rituelle Circumcision.

‡ L. c.

§ Wiener Med. Presse, No. 14, 1867.

has also happened that he cut off the whole head of the penis,* holding it, unawares, together with the prepuce between his fingers. In another instance, it was an oblique cut, which took off a portion of the inferior wall of the urethra, creating a kind of artificial hypospadia. Another case is mentioned where a portion of the scrotum had been drawn up and cut through, so as to allow a protrusion of the testicle.† Sometimes, together with the prepuce, a portion of the glans is clasped; if the clasped part escapes the knife, it comes out so contused that the function of the urethra is impaired. It is to be noted that most of these cases come under observation only in after years as existing deformities.

We find another unique case quoted by Jaffè. We should take it as a joke, did it not come from a grave and trustworthy source.‡ A circumciser, short-sighted and long-nosed, in order to be able to see his way, bent his face down so close to the sexual organ of the child, that in cutting the prepuce, he also cut off the tip of his own nose.

The barbarous custom of sucking the wound, which, however, has latterly been dropped in more enlightened communities, is a fruitful source of infection with syphilis, tuberculosis, etc. Such cases have often been disputed; but Dr. Elsberg, attending surgeon to the syphilitic division of the Hebrew Hospital of Warsaw, has recently furnished incontrovertible evidence.

On a child subjected to that procedure (sucking the wound) a number of ulcers appeared on the wounded part. On examination, tubercles and bacilli of tuberculosis were found in these ulcers, and in the caseous inguinal glands of the child, as well as in the sputa of the circumciser.

Dr. Elsberg has since reported three similar cases, and states that he has, all the year round, syphilitic children in his hospital under treatment to whom syphilis was conveyed through the same channels.§ Dr. Kédoloff|| reports the

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* Jaffè, l. c.
† Ib.
‡ Henke's Zeitschrift fuer Staatsarzneikunde, Vol. X.
§ *Med. Centralblatt*, No. 50, 1886. *Berl. Wochenshrift*, No. 35, 1886.
|| *Annales de Dermatolog. and Syphilis, Paris, 1885*, Tom. V, Nos. 9 and 10.

cases of three infants infected with syphilis in the same manner by one circumciser· All three children conveyed the disease to their mothers.

Observation and perusal of the literature concerning circumcision cannot fail to force upon every unbiased mind the conclusion that the evil consequences counterbalance the pretended prophylactic benefits.* Moreover, it is only the smallest number of such ill-fated cases which find their way into literature; the greater number, especially in communities more remote from civilization, pass unobserved, or, if observed, unpublished. Granted that these evils are exceptional and rare, the vaunted benefits are equally so.

The operative method now in use among the Jews, uniformly all over the world, is, to all intents and purposes, an extirpation of the prepuce. It was not so in former times.

After the conquests of the great Alexander, the spirit of Greek culture had gradually penetrated into Judea, and perhaps might, with peaceful measures, have overcome Judaism. But Antiochus IV, King of Syria, took it into his head to cure the Jews at once of Judaism. He applied desperate means. He burnt their books, and sometimes the owners thereof also. And we read in 1 Maccabees, chap. i, 41, 42, that "he wrote to his whole kingdom that all should be one people, and every one should have his laws." We further read—1 Maccabees, chap. i, 11–48—"In those days went there out of Israel wicked men, who persuaded many, saying, Let us go and make a covenant with the heaenth that are around about us," . . . "and they made themselves *uncircumcised*, and joined themselves to the heathen."

From these quotations we learn that numbers of Jews, partly from a desire to break with Judaism, partly with a view to escape persecution, *had recourse to a restoration or reformation* of the foreskin. For the same reasons, the performance of this restorative operation was probably continued in various parts of the Roman Empire during the two centuries after Antiochus IV. The proof for this inference we find in Celsus, who wrote his great work, "*De Medicina*," a short time before Christ. In the two books on Surgery

* E. g., Sayre's cases in *Boston Med. and Surg. Jour.*, No. 102.

(Books VII and VIII of his work), he furnishes an accurate description of all the surgical operations in practice at his time, and speaks, in Book VII, chap. 25, of the operation for the restoration of the prepuce. Philo Judæus, a contemporary of Christ, may have been thinking of this operation when he thundered against the Jewish apostates.

The operation for the restoration of the prepuce was performed either by making a circular incision around the sulcus glandularis, and drawing the skin over the glans, or in a bloodless way by an instrument (epispaster) invented for the purpose, which gradually stretched the skin till the glans became covered by it.

In order to put a stop to such an unclean, blasphemous procedure, priests or rabbis devised and ordered, at some time, the now existing operative plan, which, indeed, renders restoration of the fore-skin impracticable. The prepuce, which assists in covering the erected penis, being radically extirpated, there is no material left for the surgeon to work with. As it is, the skin of the penis becomes, during erection, stretched to its utmost capacity.

It is of no avail to wonder how circumcision can have worn so long; how it can have outlasted so many other articles of faith of younger origin and stronger texture. The fact is that it *has* worn; and as, in all likelihood, it will wear for some generations longer, human dignity demands that the operation shall be performed according to surgical methods, by the hands of a surgeon.

ART. II.—**New Methods of Treatment in Diseases of the Respiratory Organs.** By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Readers of our journals must be struck by the fact that laudable endeavors to find a means of curing the opprobrium of practical medicine, phthisis pulmonalis, are being made. For many years prior to the announcement of Koch's theory of its parasitic origin, the treatment of this disease had been purely a routine one. The announcement, how-

ever, of the discovery of Koch had the effect of giving a boom to investigation of the therapeutics of diseases of the air passages that certainly promises good results. As early as 1883, we find Debove declaring in his clinic, at the Hôpital de la Pitié, that consumption being due to the presence of a parasite, its proper treatment is the use of a parasiticide.

The first, however, to make practical application of this theory was Dr. Bergeon, of Lyons, who announced to the Academie des Sciences, on the 12th of July, 1886, his new method and the results obtained. Since that time, Bergeon's method has been extensively tried, both abroad and in this country. Modifications of it are announced, and other methods founded upon the same theory are being tried.

To accomplish the practical application of the theory, Bergeon availed himself of the physiological principle established by Claude Bernard in 1857, that certain gaseous substances, which prove toxic when taken into the system by the respiratory organs, on account of being taken up by the blood and carried through the left heart, may with safety be introduced into the system by way of the alimentary canal. These substances, when introduced by the alimentary canal, are taken up by the portal vein, carried through the liver and right heart to the lungs, and there eliminated by the pulmonary alveoli, thus entirely avoiding the left heart.

Rejecting the mouth as an avenue of introduction on account of the disagreeable taste and smell of most of these substances, Dr. Bergeon decided upon the rectum as the proper avenue. Experiments were tried upon animals with various antiseptic substances, as chlorine, bromine, ammonia, etc., but all were found to produce inflammation of the rectal mucous membrane. Finally, he discovered that hydrogen sulphide (sulphuretted hydrogen) when mixed with carbon dioxide (carbonic acid gas) was quite harmless.

The beneficial results obtained from this treatment are clearly due to antiseptic effects of the hydrogen sulphide. The carbon dioxide, when used alone, is said by Dujardin-Beaumetz to have no effect. It acts as a chemical agent in

liberating the hydrogen sulphide from the sulphur water used, and as a diluent for it.

The hydrogen sulphide is obtained from either a natural or an artificial sulphur water, by passing through it a current of carbon dioxide, a part of which goes to the formation of a sodium-carbonate compound in place of sodium-sulphide, with the liberation of hydrogen sulphide, as is probably represented by this formula: $NaS+CO_2+H_2O=Na\,CO_2+H_2S$. The remainder passes over with the hydrogen sulphide.

The sulphur waters most used in France are the natural waters, the Eau de Bonnes and Eau de Challes. In this country the water of the Red Sulphur Springs of W. Va., and the Mount Clements water of Michigan have been used, but an artificial water is considered equally good. At the Pennsylvania Hospital the water is made by the following formulæ, the second being the stronger:

℞. Sodium sulphide, pure.....
Sodium chloride..... .....āā grs. v
Water..... ..... ℥ xxij—M.

℞. Sodium sulphide..... grs. x
Dilute hydrochloric, acid, U. S. P. ♏.. xxx
Water..... ℥ xxij—M.

The apparatus in most general use is that devised by Dr. Morel for Dr. Bergeon, and consists essentially of a generator for the carbon dioxide, a reservoir for holding this gas, and a syringe-bulb for injecting, and a vessel for holding the sulphur water. It is made and advertised by almost every instrument manufacturer in the country, and as cuts of it may be seen in the advertising pages of almost all journals, it seems useless to reproduce them here.

The carbon dioxide is generated by the action of dilute sulphuric acid upon sodium bicarbonate. The gas as generated passes over into the rubber bag, or generator, and this, when filled, is closed by means of a stop-cock, and detached from the generator. The reservoir is then attached to the sulphur-water vessel by means of the hose, having in its centre the syringe bulb. By working this bulb, the carbon dioxide is pumped through the sulphur water, and passes,

mixed with sulphuretted hydrogen, through a rubber tube to the nozzle for introduction into the rectum.

In administering the enema, it is said to add much to the comfort of the patient, if the vessel of sulphur water is set in a basin of warm water. The only pain said to be caused, is that arising from distension; consequently, the clothing should be loose and the injection made very slowly, one hand being kept on the abdomen to note the amount of distension. When much pain is complained of, or marked distension noted, the process should be discontinued for a time, until absorption takes place. About twenty minutes should be consumed in pumping a full reservoir of gas through the sulphur water.

When the pulmonary lesions are extensive, the elimination of the gas takes place very slowly, and the injections must be made very slowly, or they will produce a sense of fullness in the thorax and abdomen.

As regards the quantity to be given at an injection, it would seem that small quantities should be given in the beginning, until the susceptibility of the patient be ascertained. When the patient has been found to be able to stand a certain smaller quantity, then only will it be perfectly safe to increase it. The full contents of a reservoir (6 litres) would seem to be more than is safe to begin treatment with.

One case of poisoning has been reported as having occurred at the University Hospital, Philadelphia, from these gases, in which only one quart was injected. The symptoms were respirations one hundred to the minute, and so shallow as to be almost imperceptible. The pulse was very rapid and feeble; odor of sulphuretted hydrogen was perceptible in the breath. These symptoms came on in three minutes, and under treatment the patient recovered in 15 minutes.

Two injections are given daily, at least three hours before or after eating, as they somewhat interfere with the digestive processes. It is not necessary to have the bowels moved before an injection. Neither hæmoptysis nor the presence of the menstrual period are said to contra-indicate the process. Dr. Bergeon has seen amenorrhœa relieved during

the treatment, when it had failed to yield to the usual methods.

The results that have been obtained by this new method are, according to the published reports, truly wonderful. Marked diminution in the cough, expectoration, dyspnœa, and night-sweats are noted in two or three days. There is also increase in appetite and in body weight. Dr. Bergeon considers some of his more than two hundred patients cured. He states that these no longer expectorate, and present no stethoscopic evidences of disease other than dry sounds due to cicatrized or cicatrizing cavities, or to cicatricial bands consecutive to old lesions. Some of them have been able to resume laborious occupations, and to ascend flights of stairs many times a day without injury. He states further that it is very important that the treatment should be continued for some months, until all lesions are healed, lest incompletely cicatrized surfaces undergo suppuration again, and reproduce septicæmia. This was the case with some of his patients, who considered themselves cured at the end of a few weeks, and abandoned treatment. Besides in tuberculous affections of the air passages, the treatment has given good results in asthma, whooping-cough, bronchial and pulmonary catarrhs, bronchitis, puerperal and general septicæmia.

Founded upon the assumption that such a mode of treatment would act by destroying the germs which are thought to cause the disease, it has been found that, while great results have been gained, there seems to be no diminution in the number of bacilli to be found in the sputa of patients. Both Chentemesse and Dujardin-Beaumetz declare this, and besides, the latter has found great benefit resulting from the treatment in asthma and in simple chronic bronchial catarrh. The good results obtained are evidently due to the antiseptic action of the hydrogen sulphide upon the diseased and suppurating surfaces.

The question arises whether this method of treatment will prove a curative or only an ameliorating one. Time alone can tell. Already it has been asserted by several French writers, notably Spillmann and Pasiyot, that it is only a palliative one. As to this, however, it is quite certain that no definite conclusion can be reached for months to come.

The fact is well admitted that the consumption proper is due to the suppurating lesions and the consequent absorption of septic products, probably ptomaines, or substances of like natures, giving rise to septicæmia with its train of symptoms. Now, if the treatment gives good results in controlling the suppurative processes and in healing the diseased surface, it must prove valuable in the treatment of tuberculosis, even if it does not destroy the bacilli. Founded as it is upon scientific principles, it does seem, and especially in the light of so far obtained results, that the treatment, in preventing suppuration and consequent septicæmia, must add greatly to the comfort of our patients and prolong their lives, and is, therefore, a valuable acquisition to our materia medica.

If, as some claim, patients who have submitted to the treatment for a certain length of time, lose their cough, their fever and night-sweats, regain their average weight, and present no physical signs of lung disease other than those due to cicatrized tissue, then the disease (attack) is cured so far as it lies in our power to cure many diseases. We all know that, in many forms of disease, we may and do cure existing attacks, but we know no way to insure against future ones, save by hygienic and precautionary measures.

In diseases of the character of which I speak, we general practitioners recognize a powerful causative factor in hereditary diathesis. Besides this, we often find individual tendencies non-hereditary, but seemingly acquired diatheses in certain persons. Can we remove these? I think I may say certainly not, at least in one generation. By hygienic and other means we may try to ward off attacks. Sometimes we may succeed; generally we do not, for these patients, when exposed to certain unfavorable conditions, which act as exciting causes, will have an attack, perhaps a fatal one, of the disease to which they have individual tendencies. The diathesis (or, as he expresses it, the diathesic nutritive trouble), says Prof. Bouchut, is not only an ever present morbid threatening; it is the disease in dominion (*en puissance*). And just here, may I be pardoned if I give in brief outline the beautiful theory of the learned Professor, as to

what constitutes diathesis,* for this has long been an interesting question.

Preceding every disease there is an error in nutrition, and nutrition is the life. This error in nutrition may be caused by bad hygienic surroundings, by exposure, by excesses, by traumatism, etc. Acting upon a perfectly healthy subject, the nutritive trouble may be transitory; but still, it gives rise to an opportunity for disease to invade or be engendered in the organism. It is the short diathesis of the writers of the last century. The before mentioned causes produce nervous reaction, bring about a modification of the activity of the nutritive processes to the extent of producing a medium chemically favorable to growth of vegetable organisms, or, in other words, open the doors to infection always imminent, to germs always present, and which, though destined by nature to play another part in destroying dead matter, are capable also of injuring living matter, when they find it in certain conditions. This probably is the pathogenic history of sore throat, pneumonia, etc.

A perversion of the nutritive metamorphoses also may cause disease by augmenting the quantity of normal products, or by giving rise to the formation of an abnormal one, thus giving birth to auto-intoxications. The healthy man is liable to disease, but let his vitality become lessened, and his means of defense are weakened. The chemical constitution of his organism is changed by faulty nutrition. He is now in danger of auto-infection or hetero-infection. Or, the modification in nutrition may become permanent and engender a diathesis, and a diathesis, once acquired, is transmissible. Each cell will have a defective nutrition, and will engender cells keeping the same faulty nutritive type. Among these cells, the generating elements, the ovum, or the spermatozoa, in their turn, give birth to cells in a new being, whose nutritive activity will be that of the patient. The acquired diathesis becomes hereditary.

Any treatment, therefore, which will cure an attack of

*In the pamphlet copies of Dr. Otis F. Manson's Essay (1886) on "Malarial Hæmorrhage," Prof. Bouchut's description is quoted at length, pages 97–101. Also see *Transactions of Medical Society of Virginia*, 1886, pages 364–368.

consumption, and allow the patient to enjoy fairly good health for a greater or lesser period, even though he may eventually have another attack, is to be hailed as a great gain and a great advance. The fact has been long recognized that the waters of certain sulphur springs are of value in the treatment of diseases of the air passages. It is highly probable that the beneficial effects of these waters is due to the hydrogen sulphide contained in them being eliminated by the lungs. In the light of Bernard's principle, this is, in all probability, the case. And, moreover, it is claimed by Dr. H. C. Wood, of Philadelphia, that an aqueous solution of hydrogen sulphide, administered either by the rectum or by the mouth, gives just as good results as Bergeon's method. The aqueous solution is very easily made by generating the gas and passing it over into water, which, at a temperature of 52°F., will absorb three times its volume of sulphuretted hydrogen, which it will give off again when the temperature is raised. In spite of its disagreeable odor and taste, he has in some cases given it by the mouth. He claims that when given by the mouth, it has the great advantage of better absorption from the stomach than there could be from the bowel; and the general effect must be the same, since, in either case, it must enter the portal vein and be distributed to the general (venous) circulation and is eliminated by the lungs. He suggests the use of one ounce of the saturated solution, three to five times a day, preferably in carbonic acid water. Given in this way, the dose can be much more accurately proportioned than in the administration of the gaseous enemata. An apparatus for preparing this water has been devised and made for Dr. Wood, by Dr. John Marshall, of the Chemical Laboratory of University of Pennsylvania. With the apparatus are furnished the necessary chemicals and printed directions for use. Dr. Marshall has so calculated and arranged the mixtures that the water is simultaneously impregnated with carbonic acid and sulphuretted hydrogen, and the liquid obtained has a sweetish, not unpleasant taste. The price of this apparatus, boxed for shipment, is five dollars.*

*Address, Dr. John Marshall, Chemical Laboratory, University Penn., Phila.

In conclusion, in regard to this new treatment, whether Bergeon's method or Wood's modification be preferred, clinical experience goes to show that we have in it a valuable remedy in catarrhal diseases, and a valuable adjuvant in the treatment of tuberculous diseases of the respiratory organs, even though it has no specific action in phthisis, as is very likely and little to be hoped for.

Much experimenting is going on with the hypodermic injections of antiseptic and other substances, in treatment of phthisis. Some beneficial effects have been claimed to have followed hypodermic injections of eucalyptol. The substance was absorbed, for it could be detected in the breath, but not in the urine. Sweating, as a rule, was diminished. Its principal effect is stated to be that of a balsamic preparation upon the bronchial secretion.

The latest treatment advocated is that of Dr. Kolischer, of Vienna, the hypodermic use of *calcium phosphoricum*, upon the principle that phthisical persons sometimes recover, the tubercles becoming calcareous. He claims with this treatment to have cured some patients.

Let investigation go on, for, while it is most improbable that a specific remedy for phthisis will ever be found, there is every reason to hope that, if it is not already found, some treatment will be, which will add to the comfort of our patients, and greatly prolong their lives, and remove some of the dreadful suffering now incident to death from consumption.

ART. III.—**Melancholia: With History of a Recent Case.** By B. S. ROSEBERRY, M. D., Professor of Materia Medica and Therapeutics, Baltimore University, School of Medicine, Baltimore, Md.*

There is perhaps no abnormal condition affecting the human system more trying to the physician, and causing more anxiety to friends and genuine suffering to the patient, than that peculiar state, the main symptoms of which refer to the mental and emotional nature, but most generally complicated by and probably due to some obscure physical disorder,

* Read before Baltimore Medical Association, Feb. 26, 1887.

known generally as melancholia. I propose this evening, in as brief a manner as possible, to call attention to the most commonly recognized forms of the disorder; to point out, as well as I may, the salient characteristics of each, and to indicate the plan or plans of treatment most generally found to be applicable to the amelioration or cure of the condition.

In the broad sense of the term, the *diagnosis* of melancholia is not difficult to make. One sees almost at a glance that the patient is in a state of mental depression out of all proportion to the existence of any discoverable adequate physical cause.

In the first place, it is to be observed that there are *two rather distinct forms* of melancholia. In the *one*, the patient, although depressed and extremely gloomy, is nevertheless most of the time in a state of great excitability and nervous apprehension, imagining himself to be constantly in danger of the explosion of some threatened evil, and so, goaded on by his fears and terror, will frequently endeavor to escape from himself and his surroundings. Such patients will frequently in a fit of frenzy or terror attempt to take their own lives, or that of their attendants or friends, if an attempt is made to prevent them from executing their suicidal designs. They constitute the most dangerous class of melancholics and require the closest watching and the most rigid care in order to prevent them from doing mischief to themselves or others. The *other form* of melancholia is mainly evidenced by the existence of simple, profound and causeless depression of spirits, the patient generally laboring under some delusion as to himself, either as respects his physical or moral, or, as as he generally terms it, his "spiritual" condition. Between these two extremes of mental state a great many cases are found, partaking of the characteristics of both, and at times approximating nearer to the one, and again more suggestive of the other.

Blandford says, "the simplest form of melancholia is that feeling of depression which assails most men at some time of their lives, and is generally attributed to dyspepsia, or the liver, or relaxing climate, or may be caused by difficulties or disasters. Some men feel it frequently; in some it lasts

for a few hours only, in others for days. Some may require treatment in order to disperse it, in others it passes away of itself." It is this simple form of mental depression, I believe, familiar to all of us in our own personal experience, which, when it becomes fixed, constitutes true melancholia. Of course no one pays any serious attention to what is ordinarily denominated a "fit of the blues." This I believe to be a mistake, as I shall explain later on; and it is only when the condition becomes so fixed and chronic as to attract the attention of others prominently to the affected individual, that friends and relations begin to feel some anxiety on the subject.

Now, supposing this condition of despondency or depression to have become more or less fixed, what are the most prominent *objective symptoms?* The first thing observed, of course, is the fact that the patient is profoundly and unreasonably depressed, and he mopes about, talks little or not at all, takes no interest in anything going on around him, has lost interest in his business or profession—indeed, is incapable, by reason of the intense preoccupation of his mind, of devoting any time or attention to his ordinary pursuits. He is occupied entirely with the contemplation of himself, and all other subjects are, to a very considerable extent, completely excluded. He is filled with the gloomiest delusions in regard to himself. If he has some fancied physical complaint, he is constantly occupied in observing it, watching its progress, and will testify to experiencing the most aggravated sufferings growing out of his malady. The fact that the fancied disease has no real existence makes not the slightest difference to him; indeed, it is most generally impossible to convince him of its non-existence. He hugs his delusion to his breast, and derives an insane satisfaction from the endeavor to prove the correctness of his statements and beliefs in regard to it. If the subject upon which his mind is morbidly dwelling be not a physical ailment, it is most likely to be a moral shortcoming. This latter is probably the most frequently met with condition, and from the very nature of the case more difficult to manage. You may sometimes relieve the former by pretending to fall in with his

views and then physic him out of it. In the latter event, this will not do. Whether you agree with him, admit his iniquity and suggest repentance and prayer, or whether you antagonize him and try to reason him out of his delusion by demonstrating the absurdity of it, it is all one with him. There is one expression which seems very accurately to describe his condition: he is never happy except when he is miserable, and never miserable except when he is happy.

The physical appearance of the individual affected with melancholia is extremely characteristic. He usually presents the appearance of abject misery and hopelessness. His countenance is heavy, dull, leaden; the face is sometimes flushed, again pale and drawn. He either sits motionless and quiet, or on the other hand is restless, moving about from place to place in the same room, or going from one room to another, lying down on lounge or bed for awhile, then after a few minutes resuming his chair again—in every way showing utter satiety of his own company and yet unable to withdraw his thoughts from himself.

As to other physical appearances, there may be no special change, *i. e.*, nutrition may be good, the appetite remaining fair, or there may be disinclination or absolute refusal to take nourishment, in which case nutrition will suffer and emaciation may become marked. The tongue is usually coated with a thick moist fur in these latter cases, and the breath will be found foul and offensive, the bowels being obstinately constipated. These conditions of the digestive tract are probably due, not so much to dyspepsia, to which they are often attributed, as to a secondary depression of function, the result of the profound preoccupation of the cerebral centres. In other words, they are most likely to be effects of the mental condition originally, and not causative factors in the case. After being established, however, the digestive and biliary derangements no doubt react upon and intensify the mental and emotional aberration.

Sleeplessness, more or less profound, is probably the most constantly present departure from the normal condition. It is a symptom rarely absent. Sometimes it will yield satisfactorily to the milder hypnotics, as the bromides; again the

most powerful, as opium and chloral hydrate, have to be resorted to. The sleep is broken in an irregular manner. Sometimes the patient will sleep at intervals of short duration throughout the entire night; again, the insomnia being almost complete, the patient remains awake throughout the whole night, or perhaps for several nights together, only yielding at long intervals to sheer physical exhaustion. Even after sleeping fairly well all night, the patient does not usually seem to waken refreshed as from natural sleep, and his mind takes up immediately on wakening the gloomy reflections which seem only to have been partially interrupted by the quasi repose.

The *causes* of melancholia are extremely difficult to determine—indeed, it is hardly possible to assign an absolute cause. There are certain states of system which doubtless act as predisposing causes.

General and long continued physical debility, where it exists, is doubtless responsible in a considerable degree for the occurrence of the mental condition, but it must be remembered that it is not in and of itself capable of bringing about an attack. If it were so, we should find that the cases of melancholia associated with debility were largely in excess of which we know them to be. In order that this condition (debility) shall be an efficient cause, it would seem that it must co-operate with some inherent predisposition or individual trait of the patient. We know, really, that it is extremely common to find the most sound and well regulated minds in persons of feeble body. We must then look for something beyond mere physical derangement and general debility. Often no adequate cause can be discovered.

The age of the patient seems an important point. Though found at all ages, it occurs most frequently at a time when, in the course of nature, the vital powers are beginning to decline. It is at this time that we meet with cases of so-called *climacteric insanity*.

Heredity probably plays an important role. It has been frequently noted that the different individual members of certain families, throughout several generations, exhibit a tendency to develop morbid fancies and become melancholic.

Sex is, on account of the peculiar functions of the female, a predisposing cause. Girls at puberty, women after parturition, sometimes during pregnancy and again at the menopause, frequently develop the condition. It may be remarked, however, that cases occurring under these circumstances generally recover after the exciting cause has passed by, and are not, as a rule, very protracted. It should be further noted that these special circumstances peculiar to the sex cannot always be proven to be causative in female patients. Girls become melancholic with no menstrual derangement; women who have never borne children are frequently victims of the disorder, and others pass safely over the menopause only to develop melancholia years later.

The only thing, then, which may be said certainly in regard to age is that more cases in both male and female occur in somewhat advanced life—say from 45 to 60—than earlier. Out of 338 cases of melancholia admitted into St. Luke's Hospital, only 9 patients were below the age of 20.

It is an old belief, as its name indicates, that it is connected with the liver and its functions. Schroeder Van der Kolk even located its cause as being connected with the colon. Clinical experience, however, will not support this theory. Melancholia is often seen in individuals having no hepatic or intestinal disturbance whatsoever, and when present is as likely to be an effect as a cause—indeed, more so. When present these conditions will generally yield promptly to medicinal treatment; but the melancholia will persist.

Some cases of melancholia seem clearly traceable to irregular sexual hygiene, and *a priori* it would seem that there is considerable reason in assigning the sexual system an important place as respects its influence upon the emotions. Still in many cases no sexual element of a disturbing character can be demonstrated. Abuse of alcoholic stimulants is occasionally a causative factor. This, too, might be expected; but attacks clearly traceable to this cause are apt to be transient, and are much more amenable to treatment than cases of melancholia in general.

Unfortunately, in the great majority of cases no adequate cause can be assigned, and this constitutes almost the whole

difficulty in the case. The most that we can say is that an individual previously well, and in the full exercise of all his bodily functions and mental faculties, it may be somewhat slowly, but after all suddenly, changes and presents for our inspection the characteristic features of the confirmed melancholic. His mind has suddenly gotten out of joint. It is not broken, but dislocated. He can no longer see himself in his proper relation to his fellow-man and society in general, but sees instead a distorted image of himself, conjured up out of his own cranky imagination. He is, according to his own statements, a great criminal, an unpardonable sinner, doomed to eternal punishment; a hopeless physical wreck, eaten up with disease; or he is the victim of the malevolence of others, and is the most persecuted individual in the world, punished daily and hourly for crimes he never committed, and in deadly fear of his life at the hands of scheming enemies. A sad picture, indeed, is the victim of profound melancholia.

The *prognosis* of subacute melancholia, where depression is the main characteristic feature, is generally good. In the acute form of the disease, characterized by excitement and terror, if the patient be carefully watched and prevented from doing himself injury or committing suicide, the prognosis is also, as a rule, good. Recovery, in fact, is frequently more rapid after improvement begins to take place in the maniacal than in the form of pure depression, which is more apt to run a protracted course. Some of the latter cases recover after a period of depression lasting from five to seven years. Blandford says that this is probably the only form of mental derangement in which the prognosis is ever good after the disease has existed for so long a time.

It must not be inferred, however, that the prognosis, in either the acute or subacute form, is always favorable. As a rule, under proper, judicious management, it is. Not infrequently, however, this rule is proven by exceptions. The most acute forms either go on rapidly to death from general vital exhaustion, or, after a more or less short time, begin to improve, the maniacal condition giving place first to melancholia, with depression, and the latter somewhat rapidly,

comparatively, clearing up. Some cases which are of "the subacute" form from the beginning occasionally become permanently fixed, the patient becoming finally, practically imbecile. A great deal depends, of course, upon how the case is managed.

This suggests the matter of *treatment.* The first thing to be done is, if possible, to locate the cause or causes, partial or complete, which have precipitated the attack. As already seen, this can rarely be determined. If there are obvious physical derangements—such as hepatic irregularity, cardiac trouble, organic or functional, uterine disturbance and sexual fault, or general mal-nutrition—they must be appropriately treated. But the melancholia will not always, by any means, disappear after these conditions have been relieved. It would seem that the morbid idea or ideas have become in a manner fixed in the brain, and continue to be active from force of habit. It must be remembered that the patients themselves, throughout the whole course of the attack, are to a great extent conscious of the absurdity of their ideas, but they are unable to correct by one part of the brain the illusions of the other. The treatment, then, aside from attention to concomitant physical conditions, is mainly moral.

In the very start, one thing must be borne in mind—viz., that the melancholic, in most if not all cases, is a would-be suicide. He may or may not so express himself, but all the same, reflection, possibly involuntary, upon the relief to be obtained by self-destruction is there. It may not amount to a positive impulse, or if it does, he may for the time be capable of the exertion of a sufficient amount of will-power to deter him from translating the impulse into action. The lesson from this is, he should never be left alone and given an opportunity. No apparent calmness of the patient would justify lack of vigilance. The impulse is liable to come on like a flash, and as quickly to be executed, if the time be opportune. Careful and unremitting watchfulness is a *sine-qua non* of treatment. This, as far as possible, should be effected without the patient's knowledge. As they require to be constantly diverted by all possible means, this affords an ample pretext for never leaving them alone.

One question will come up early in the course of the disease—should the patient be kept at home, or sent to an asylum? The answer to this question involves outside considerations. Ordinarily it is mainly a matter of the pecuniary condition of the patient or his friends. If means are not wanting, it would probably be better, in most cases, to keep the patient at home, or at all events outside of an asylum, with proper restrictions. The friends must of course be early warned of the homicidal and suicidal tendencies of the patient, and be instructed as to the best means of guarding against an outburst of them. Sometimes they already know of them by the patient's conversation and manner, but not always. If the patient and his friends are in indigent circumstances, it is imperative that he should be sent to an institution, where he can receive proper care. It must be borne iu mind that the melancholic patient is an intense egotist. He thinks of nothing whatever but himself, and if he notices his surroundings, whether they be good or bad, or even if temporarily he reverts to the current events of the day, when they are called to his attention in the endeavor to interest and divert him, it is only to use them as complementary circumstances, augmenting and intensifying his own sufferings. However, an indispensable part of the treatment is to combat this state of affairs, and to constantly endeavor, by every means possible, to get him away from himself. This requires an immense amount of tact and patience, and a considerable degree of intelligence. For a long time, one's efforts will result in disappointment, and the patient, who brightens up temporarily under the cheering and encouraging influence of well-directed, hopeful conversation, will very quickly relapse into his former state of gloom—after the stimulus is withdrawn. Like a spring-bar which has been drawn into a curve, it flies back as soon as the restraining hand is removed.

Probably the most beneficial effect to be obtained from moral influence is found in travel and change of residence, with a proper companion or companions, and a complete absence of accustomed surroundings and old objects associated with his gloomy mood, the patient is often led, by

easy gradations, insensibly away from himself, little by little evincing interest of a natural, healthy kind, in first one thing, then another, until, after a greater or less length of time, he awakes to the consciousness that he is himself again, at which time he can look back upon the condition from which he has emerged, and see it as others have seen it all along, and recognize the fact, which before he persistently denied, that he has been suffering from disease, and not under punishment for iniquity.

One thing I am convinced of from a great deal of reflection upon the subject, brought about by constant attendance for the past four months upon the case which I shall briefly relate this evening—and that is, that melancholia is a disease much more easily prevented than cured. This is what I had reference to in the early part of this paper, when I expressed the opinion that it was a mistake to treat with complete indifference an ordinary attack of despondency. Every case of melancholia commences in this way, and if one will consult his own intelligence, he will see that the two conditions differ only in degree and duration, and that in pronounced cases it is but the affixation in the mind of the original depressed feeling.

Melancholia usually occurs in individuals who are of more than average mental power, and who have the habit of thinking deeply. Therefore I think it very important that whenever, in the course of our professional duties, we observe useless despondency over trivial matters in those whom we believe to be good soil for the development of melancholia, we should give them due warning of their danger, and apprise them of the vital importance to themselves, their families, and society, of putting a period to their morbid repinings while they yet have power to do so. By this sort of prophylaxis, I believe many cases of melancholia could be averted. I think it, in other words, not a very difficult matter for any one, at times, to lapse into profound melancholia, by failure to exercise a due amount of will-power in combatting the disorder in its incipiency.

As to medical treatment, not much is to be said. The bowels, if constipated, should be kept regular by laxatives.

Food should be taken, even if not desired, regularly and more frequently if anything, than in health, and if there is any failure in nutrition, it should be of a rich, stimulant character. There is always a more tranquil state of mind with a full than with an empty stomach. Insomnia must be combatted, and if possible removed. The bromides are frequently all that is necessary, particularly if given to the extent of producing mild bromism. Chloral hydrate and opium are often of signal service, and of late hyoscyamus and its alkaloids have accomplished, in some cases, much good. I have fancied that I have seen considerable benefit from the valerianates at certain stages of the disorder.

Case: I was first called to see Miss M. S., aged 57, on October 24, 1886. She is and has been a teacher in the public schools of this city for over thirty years, and is a woman of more than usual intelligence and strength of character. In physique, she is of moderately large frame and quite fleshy, weighing about 150–60 pounds. Her general health has always been good, and her natural temperament is bright and cheerful. When well, she is a fine conversationalist, having a fund of general information obtained both by reading and travel and observation. One very prominent characteristic of her disposition is a very exalted sense of duty and rigid conscientiousness. All her life she has been a consistent member of her church and zealous in the discharge of Christian duties.

When I was first called to see her I was informed by her family that for several weeks she had been very despondent and low spirited, brooding over her spiritual shortcomings, and haunted with the idea that she had fallen from the faith, and was doomed to eternal punishment. This was the keynote of her woes, and the delusion was becoming all the while more and more fixed. They also informed me that she had several times intimated, indeed, said, that she thought it would be better for herself and all concerned, if she should terminate her existence, and she felt herself constantly tempted to do so. Upon questioning her, she corroborated all this, and talked very freely to me of her feelings, reproaching herself bitterly for having allowed herself by carelessness and neglect of proper self-examination, to fall into the hands of "the adversary." She was in her ordinary physical health—no marked departure from the normal in any of her functions being present, except well marked

insomnia. Her digestion was fair, though not perfect, and the bowels only slightly constipated. What irregularity of this sort there was, cleared up in a few days, under appropriate treatment, and has not since returned.

The insomnia was treated principally with sodium bromide, and the circulation, which for a time was rather accelerated, was held in check by digitalis. Hyoscyamine was given a fair trial, but, whether from inertness of the drug or other cause, no very appreciable benefit was derived from its use. It was left off for an interval, and she got on just as well without it. Upon resuming it again later on, and giving it another trial, no apparent benefit was obtained from it. In effect it seemed negative.

About two weeks after first seeing her, I sent the patient to Norfolk, Va., in pleasant company, for a trip, which it was hoped would be beneficial. She stayed about two weeks, but was not improved on her return. After returning, the homicidal and suicidal manias became decidedly aggravated. She always testified to this herself, and used it as an argument to prove the depths to which she had sunk in guilt. She said she was given over entirely to the "evil one," and that she could no longer get access to the Creator by prayer. Her excitement and self-torture increasing, and the impulse to do some violence to herself or others becoming more pronounced, she was put on larger doses of the bromide, which was pushed to the production of full bromism. After this the violent impulses subsided, and have not since returned to any marked degree. After bromism had been maintained about ten days or two weeks, the salt was withdrawn until the condition passed away. It was then resumed in small doses, only sufficient to insure good sleep.

She has also taken most of the time for the last two months, 3-gr. doses of zinci valerianas ter die. From this she seems to get considerable benefit as respects the nervous system. It was given to relieve a certain amount of muscular tremor and incoördination which existed from time to time. Under its use, this condition disappeared.

Her appetite has been fairly good, and she has, without forcing, taken a sufficient amount of nourishment; so nutrition has not suffered. The bowels have acted well spontaneously. Her gloom and despair continue, however, only occasionally, and for a very short time a rift in the cloud occurs.

The main feature in the case is the closest sort of mental analysis, intense introspection and self-accusation. The

case has now lasted four months. For the last two months surely there has been no special change in her condition. It is almost impossible to get her to talk on any other topic but her own woes. If not doing this, she is silent. Occasionally, with a chance caller, she will indulge in general conversation, but only in a constrained, pre-occupied, half-hearted manner.

The only known exciting cause for this attack is found in the fact that it became necessary last fall for her to change her residence from her brother's, to whom she is much attached, and with whom she had always lived. This worried her considerably—indeed, out of all reason, and it was upon this subject that she first began to brood. Twenty-five years ago she had a similar attack, which, however, did not last so long, and at a time when her general health was much depreciated. It terminated in a severe spell of gastro-malarial fever, and she remained well after recovery till the present attack. Her father, who was a physician, had a similar attack, occurring during the existence of obstinate dyspepsia. It disappeared along with the dyspepsia, and never returned. No other relative has ever been similarly troubled, save an aged aunt on the paternal side, who, although always of a gloomy, desponding disposition, inclined to take life hard, and extremely sensitive, has never been considered as a case of melancholia.

Since the above was written there has been but little, if any, change in the patient. She was sent to Clifton Springs, N. Y., in April, and is still there.

1209 *John Street.*

Peacock's Bromides.—Dr. W. H. Wolford, Chicago, Ills., says: "I have used Peacock's Bromides in a number of cases with the best results, especially in epilepsy—one case in particular, a railroad man, having been compelled to quit work on account of paroxysms coming on every day. After one week's treatment with Peacock's Bromides the attacks were considerably lessened; now, after two months' treatment, he seems entirely cured, and has resumed work."

Clinical Reports.

Case of Extra-Uterine Pregnancy Complicated by Intra-Uterine Pregnancy.* By ISAIAH H. WHITE, M.D., Late Surgeon of St. Paul's Church Home for Aged and Infirm Women, etc., Richmond, Va.

Mrs. S. M , age 37, mother of one child now 13 years of age. In June, 1876, having experienced the usual symptoms of pregnancy, including fœtal movements, and estimating that she was then eight months advanced in pregnancy, had a slight fall, followed by labor pains which lasted for several days, and expelled a decidua; there was afterwards cessation of the fœtal movements, and a gradual subsidence of the abdominal enlargement, until there was left a tumor occupying the right iliac region about the size of two large fists. Her health continued feeble for several months, but was subsequently sufficiently restored to enable her to do her own house work.

In January, 1886, I saw her for the first time, in consultation with Drs. Farrar and Crenshaw, when I obtained the foregoing history. Her menstruation, which had been regular since the restoration of her health, had ceased since August last. The tumor, which had formerly occupied the right iliac region, had since then risen to nearly a median position above the umbilicus, and felt hard and nodular. Separated from this by a distinct sulcus was another tumor, about the same size, and occupying the normal position of an impregnated uterus; this was regular in contour, and much softer to the touch than the other. No fluctuation could be detected in either tumor; auscultation gave negative results; the hand placed over the uterus could distinctly feel alternate contractions and relaxations. The cervix uteri was directed to the left side, and patulous.

Diagnosis: An encapsulated extra-uterine fœtus and intra-uterine pregnancy.

Treatment: As her condition was exceedingly critical, in consequence of prolonged and excessive nausea and vomiting, induction of labor was advised. She was delivered of a five-months fœtus, and made a good recovery. Two months later I saw her, and found that the tumor had returned to its former position in the right iliac region, was hard and nodular, and on bimanual examination, there could

* Reported to Richmond Academy of Medicine, June 21, 1887.

be felt a sensation giving the impression of two flat bones grating together.

In March last, I was again called by Dr. Farrar to see this patient, and found that she had not menstruated since November, 1886; the tumor had again risen from the right iliac region, and was situated near the umbilicus, the uterus enlarged, and the same alternate contractions and relaxations observed as before. The opinion was expressed that she was again pregnant; and as her general health was good, advised non-interference, trusting that she might go to full term.

On the 15th of June, I again saw her, finding her very much prostrated by an attack of dysentery, and much distressed by the great size of the combined tumors, which now reached nearly to the xyphoid cartilage. In view of her condition it was deemed best to induce labor, which was accordingly done, being delivered the next day of a seven-months fœtus, which lived twelve hours. Patient died on the 18th.

Autopsy twelve hours after death. On opening the abdomen, there escaped possibly half a pint of a greenish fluid, with an odor suggestive of an alcoholic anatomical preparation. Dense, firm adhesions were found everywhere in the region of the tumor, the omentum and intestines being firmly adherent to its walls, in consequence of which its precise anatomical relations could not be made out. There were no evidences of recent peritonitis. At one or two points on the surface of the tumor, amidst the adhesions, there were small cysts, which, when ruptured, discharged a viscid straw-colored fluid.

The tumor occupying the right iliac region, and attached to the right side of the uterus, was with it removed entire. On opening the dense, fibrous sac, a perfectly preserved and fully developed eight-months' fœtus was discovered. There was no fluid of any kind in the sac; and at points where they were in immediate contact, there were adhesions between the fœtus and its sac. The tissues of the fœtus had the appearance of having been preserved in alcohol.

The points relied on for diagnosis in the case were, for the extra-uterine fœtus: The intelligent history of the symptoms of her pregnancy, including the fœtal movements, and the subsequent *diminution in the size* of the enlargement For the intra-uterine pregnancy the symptom most relied

on was the alternate contraction and relaxation of the muscular coat of the uterus.

The "innocuous dessultude," into which this fœtus had fallen for eleven years, is a strong argument in favor of the practice of causing the death of the fœtus, either by galvanism or otherwise, and allowing it to remain *in situ*.

Correspondence.

Hydrophobia [?] in the Horse—Man Bitten—No Hydrophobic Result.

Mr. Editor:—In the June number of the *Virginia Medical Monthly* is an editorial referring to the case of Mr. Garnett and his supposed rabid mare. I fully agree with the object of the editorial; but there are a few points in it that need correction, and in order that the case may be thoroughly understood by your professional readers, I will necessarily have to give all the facts in connection with it.

February 11th, 1887, Mr. R. E. Garnett brought to me for treatment a small black mare. I noticed something peculiar about her, and therefore stood on the steps for a few moments to observe her actions. She appeared somewhat excited, champed the bit, tossed her head, and showed general symptoms of uneasiness. As she persisted in switching her tail, I walked behind her, and saw continuous twitching of the vulva, and the mucous membrane of the vagina highly injected. I asked Mr. G. how she had been acting before he brought her to me, and he gave me a history of the case, of which the following is a synopsis:

On Christmas day the mare had been bitten on the nose by a dog; he had been driving her more or less every day since; been "horsing" excessively the past three days, and has been very nervous, and easily excited; gets worse when spoken to sharply. Concluded to take her to stallion this morning; hitched up and drove her to town, then over to Manchester. While there she had a fit and fell to the ground. Did not let stallion go to her; brought her back to Richmond. Whilst hitching her up this morning, she several times tried to bite; before she was hitched she would bite at her breast—just nip the skin.

During the time Mr. G. was giving me the above facts, he was sitting in the buggy, and I was standing at the front wheel, closely observing the mare, when suddenly she had a convulsive attack, and fell as if her brain had been pierced by a bullet from a rifle. She struggled spasmodically for a few moments. We removed the harness as quickly as possible, and she arose without difficulty. I directed Mr. G. to carry her around to the alley-entrance to the mule-pens, and I went through the stables to unlock the door. When he brought her into the pen, he informed me that she had just bitten him on the back of the finger. I looked at the wound, which was a slight abrasion about the size of a dime. I held the mare, and directed him to go to the hydrant—only a few feet away—and thoroughly wash the hand. As soon as this was accomplished, I directed him to suck the wound with his mouth, which was done effectually for five minutes or more. I then got a gentleman who was present to take charge of the mare, and Mr. Garnett and I went up-stairs to the office (he sucking the wound all the time), where I thoroughly cauterized the wound. This operation caused him considerable pain and some shock, and I consequently advised him to take some stimulants, which he did. I was now satisfied that I had performed my full duty to Mr. G. individually, and I therefore advised him to go to a physician and tell him all the circumstances. Mr. G. asked me if a physician could do any more for him than I did. I informed him that my diploma limited my practice to the lower animals, and his friends would be better satisfied if my treatment was sanctioned by a physician whose business it was to administer to his fellow-beings.

I told him to inform the physician that, notwithstanding the dog-bite, I pronounced the mare's affection hysteria, but in view of the history of the case, and for fear of being censured, I took every precaution that was prompted by knowledge and reason. Mr. G. departed in search of a doctor, and I turned my attention to the mare. When returned to the pen, she was tied to a post with one of the lines, which she chewed continuously, much in the same manner that a puppy chews away at a piece of leather. There was constant switching of the tail, twitching of the vulva, great vascularity of the visible mucous membrane of the vagina, urine as colorless as absolute alcohol, frequently ejected; intermittent convulsions, during which the membrana nictitans was forced almost completely over the cornea; emprosthotonos was of the most pronounced character. She would

fall from where she stood with scarcely any premonitory indication, and after a few clonic spasms would easily assume the standing posture. The severe spasms of the gluteal and dorsal muscles could not escape the notice of the least observant; towards the end, when down, the automatic movements of the legs were very violent. An old mule standing in the next pen excited her sexual desire to a great extent; she would smell his nose, and then whine as naturally as any mare in the normal period of œstrum. She exhibited no desire to fight or bite the mule.

The more I watched her, the more I was convinced that it was a case of hysteria. I tried the stomachic administration of remedies, but as it only excited her, I administered the medicines hypodermically and *per rectum.* About this time Dr. Bowles, V. S., came in. He was told the history of the case, and observed every symptom; and after mature consideration, fully concurred with me in my diagnosis of hysteria.

As the mule excited her sexual desire to so great an extent, we moved the mare back to the darkest and quietest pen. As she would chew the rein with which she was tied, and nip at her breast, and for fear that she might bite some person helping us, we put a muzzle on her. At no time did she appear rabid, and only once did she show any evident intent to do harm, and this was whilst I was standing in the manger, after trying to "drench" her; the rein became fastened between a board and post, and I had to give it a strong, sudden jerk to get it loose; when I did this, she laid back her ears, outstretched her head, as if about to dash at me, when I raised a hand and spoke commandingly to her; she became docile immediately. There was nothing treacherous about her actions—nothing done with intent. She walked about the pen amongst us much the same as a horse affected with a severe attack of acute indigestion.

During the convulsions, there was often trismus, as well as emprosthotonous. Sometimes the trismus was absent; and when the head was drawn to the breast, she would bite it, or the ground in front of her when she was down. There was no desire to bite anything in particular, much less a desire to bite a person, as she did not seem to notice those around her. Her voice was natural, aud she often neighed after we removed her away from the mule, as she could possibly get a sight of his head occasionally over the top of the pens. With the one exception mentioned above, she exhibited no signs of viciousness. When not in convulsions, all her actions bespoke a semi-delirious condition.

The convulsive attacks grew more frequent towards the last; medicine had no effect; one spasm succeeded another in rapid succession. I had her held down for about ten minutes; she fought violently; when released, she did not arise; remained quiet for some time; then convulsions ensued, which ended in death. A few minutes before death, the urine passed was more natural in color.

In conversing with Mr. Garnett and those interested in him, I have never failed to ridicule the idea of the mare being affected with rabies. It was necessary for me to do this, even if I had been convinced that the dog that bit the mare was rabid, for the simple reason that certain friends(?) of his were doing all they possibly could to precipitate an attack of spurious hydrophobia by kindly informing him that he was sure to die; by advising him to visit madstones; by assuring him the mare was mad, etc., etc. Mr. G. informed me that one gentleman drove through the country and ordered two dozen or more dogs to be killed for no other reason than that the poor dogs were so unfortunate as to live in the neighborhood visited by the *suspected* dog. The day following the death of the mare, Mr. Garnett's dog and cat acted in a very suspicious manner; in fact, *had fits!* Now of course the state of Mr. G.'s nervous system was in no condition to stand any such nonsense; he therefore took down his gun and shot them both. This was still further proof, to those already convinced, that the mare was mad; but Mr. G. was one of the first to discover that some officious person had poisoned the dog and cat for fear they would go mad. Among the number of dogs ordered to be killed was one which disputed the right of way with the reprobate dog in question; a rough-and-tumble fight ensued, during which the reprobate dog literally "tore" the disputant dog, lacerated him, and laid him up for repairs. This dog now became "a suspect," but the owner refused to kill him. However, he was confined and closely watched, and has made a good recovery from his late indisposition, without any suspicious symptoms that I am aware of.

Running at the mare's side was her four-months old colt, and the poor little colt also came in for its share of suspicion, and for weeks after was "a suspect." (I believe Mr. G. was advised to kill the colt.) The colt is now growing up to be a fine animal, and has never shown any symptoms that indicated that universal specific for hydrophobia in the lower animals—the gun.

Now, when these animal were suspected and watched so

closely, how much more carefully do you suppose Mr. G. was watched? Some of his best customers did not go to his store for some time, and some of those that did visit him were very careful not to excite him, whilst others felt safer when the counter was between them and Mr. Garnett.

The above state of affairs is not exaggerated. Much more could be added, but I have given you sufficient to show that the case had to be handled with judgment. Mr. Garnett and I were on very friendly terms, and he relied implicitly upon my statements and advice. When he received the letter from the New York Pasteur Institute, I advised him to pay no attention to it, for various reasons, chief among which were that it would have been an admission on my part that the mare had hydrophobia, or rabies, and consequently his confidence in me would have been shaken. Another reason was my skepticism on the whole subject of hydrophobia, except in the spurious form brought about by fear, dread, and nervous impressions, and my whole endeavor was to avoid this very thing. Another reason was, I knew the treatment I had given Mr. G. was far more successful than Pasteur's inoculation, even if we admit that the mare had rabies. I informed Mr. G. at the time I was attending to his wound that I did not believe in hydrophobia, but that I would do everything for him that could be done by me if I was a firm believer in the existence of such a disease. I am confident that sufficient time did not elapse for absorption to take place, and consequently, as far as Mr. G. was concerned, I was satisfied that he was protected, even if my diagnosis of the mare's disease was incorrect. I did not allow my belief or disbelief to interfere with anything that could be done for him. But I conscientiously could not do otherwise than advise him not to visit Pasteur Institutes, mad-stones, etc. It is recorded that Youatt cauterized wounds on over four hundred persons bitten by dogs supposed to be rabid, and not a single death, or symptom of hydrophobia among that large number! Do the statistics of Pasteur's method give us as good a showing? Most certainly not.

Did the mare have rabies? According to the symptoms

laid down in standard veterinary works, she had a disease very much like it; and I am very much inclined to say that if ever there was a case of rabies in the horse, this was a case; but if I made that statement, I would necessarily have to convey with it my opinion that there was no such disease as rabies affecting the equine species; because I adhere now as strongly to my diagnosis of hysteria as I did the morning I made that diagnosis, although I must admit that some of the circumstances immediately following the mare's death were enough to cause a skeptic to be a little "shaky" in his opinion, until investigation proved the true nature of affairs. I have seen several cases of hysteria—one in a mare. mule. Scientific veterinary writers record cases of it. The symptoms are sufficiently like Mr. Garnett's mare's affection for diagnostic purposes. Dr. Bowles, V. S., once owned a mare that was subject to attacks of hysteria, in a milder form than the above, at her regular periods of œstrum.

I will quote from Prof. Williams' "*Principles and Practice of Veterinary Medicine*," his article on hysteria:

"Concurrent with the period of œstrum in the female, the following symptoms—clenching of the jaws, grinding of the teeth, difficulty of swallowing, some degree of trismus, squinting of the eyes, tonic spasms, alternating with those of a clonic kind, continual kicking in an irregular, uncontrolled manner with one or both hind feet, stamping of the fore feet, and other signs of nervous excitement—have been observed in the mare and female ass.

"In one case that I saw, the two fore shoes and one hind shoe had been thrown off by the violent kicking and stamping. Attempts were made to remove the remaining one, which was loose. They were, however, unavailing, as the slightest touch caused a most violent kicking. The animal would fall, the whole trunk and neck being perfectly rigid, whilst the limbs continually moved in a violent and spasmodic manner. The power of volition seemed to be completely lost. The gluteal muscles were exceedingly hard and prominent. The rapid opening and closing of the vulva, and its highly injected mucous membrane, indicated the hyperæsthesia of the genital organs. Urine was passed abundantly—at first pale and watery, but afterwards highly-colored, and loaded with solid matters.

"In another case the symptoms were rather different.

The animal was prostrate, rigid, with its eyes turned upwards, as if in a trance. One recovered, the other died," etc.

Now, suppose the first case quoted above had the history of a dog-bite in connection with it—is it not fair to presume that it would have been recorded under the head of rabies, instead of hysteria? If you grant that presumption, is it not more than probable that many cases of hysteria in the lower animals have been classed as rabies? If you coincide with this view, don't you think it is a rather dangerous thing for an animal to indulge in any nervous disease characterized by convulsions? *Remember the gun.*

I never saw a case of rabies in any animal, high or low; and I never saw a person, who was competent to discriminate between diseases, that could say that he saw an undoubted case of rabies; and consequently the only information as to symptoms I must obtain from the text-books, and I must admit that the veterinary text-books give the symptoms of rabies in the horse very much like the symptoms displayed by Mr. G.'s mare, inasmuch as œstromania is given as one of the most prominent symptoms.

There was no hydrophobia presented in this case; as the mare stood near water falling from a hydrant into a large trough for nearly an hour, and was much less excitable than when we removed her to the back pen. In fact, she paid no attention whatever to the water. Many other legendary symptoms were wanting.

Even admitting the occurrence of rabies as a disease transmissible from one animal to another by inoculation, I think I am justified in asserting that Mr. Garnett's mare did not have rabies.

I thoroughly appreciate and endorse your condemnation of sensationalism in connection with mad-dog scares; and in this connection I would like to incorporate in this paper the following "propositions and problems," extracted from a paper read by that well-known neurologist, Dr. E. C. Spitzka, before the Society of Medical Jurisprudence and State Medicine, in New York city, June 10th, 1886:

"I. There is, at present, no proven epidemic of hydrophobia, either in New York city or its vicinity.

"II. A number of deaths have occurred from spurious hydrophobia (lyssophobia) in New York city and its vicinity during the past nine months.

"III. The agitation of the subject of Pasteur's method of preventive inoculation for hydrophobia, and the accompanying strained accounts of suffering and death from that disease, are responsible for these deaths.

"IV. To prevent the serious and oft-times fatal imaginary disease, it is necessary to inculcate a healthy public sentiment, which shall frown down the agitation of questions, which are of a strictly scientific character, by persons who are neither biologists nor physicians, and who have no other motive than the creation of a sensation, regardless of consequences.

"V. It should be strictly inculcated on all officers entrusted with the preservation of the public peace and public health, that the only way to determine whether a dog is suffering from rabies or no, is to submit him to inspection by competent veterinarians in a living condition. The desirability of some such ordinance is attested by the fact that persons on the road to death from hydrophobia have recovered on learning that the dog who bit them remained alive and well.

VI. The results of researches on hydrophobia should, for the present, remain within the domain of technical literature. There are so many problems connected with the question of rabies, which are as yet, and promise to remain for some time, unsettled, that it would be tantamount to criminal recklessness to publish prematurely alarming discoveries in the lay press.

"VII. The method of demonstrating rabies by direct inoculation of the brain is fallacious. The conclusion drawn by Liantard, from an experiment thus performed, that the Riverdale dog was mad, was obtained by misleading methods.

"VIII. The means to be adopted to prevent future outbreaks of hydrophobia is to muzzle the dogs, to dam up the torrents of ink flowing from the pens of hasty investigators within appropriate receptacles, and to exclude sensational publications from the household."

Respectfully,

W. H. Harbaugh, V. S.

Richmond, June 21, 1887.

Pinus Canadensis in Gonorrhœa, Leucorrhœa, and Chylous Urine.

Mr. Editor:—In several journals I have noted some comments on the use of corrosive sublimate as an injection in gonorrhœa; but none of them notice one of the best injections that, I think, can be used; I mean Kennedy's pinus canadensis. I have used it in five males and six females in my practice with success, the males having neither stricture nor prostatic complication. I order a syringe large enough to hold enough of the medicine to put the passages fully on the stretch, and retain them in that condition for several minutes. The preparation, by that means, comes in contact with every part of the surface. In either sex, I order hot water douches to be used; or in the case of males, to pinch the end of the penis, and strain while passing urine, so that the urethra will be cleansed as far as possible.

I use the "pinus" in leucorrhœa in the same manner—hot-water douches first, and then a pledget of cotton, saturated in the medicine, is placed, *in situ,* and allowed to remain twelve hours. I have objections to mercurial sublimate, on account of carelessness of the parties leaving the bottle where it might get some one into trouble; also on account of the possibility of absorption from a raw surface. There can be no possible danger in either case from the other medicine. It is to be used of fifty per cent. dilution with water. Only a slight heat is felt for a few minutes in the most tender surfaces.

As a remedy for chylous urine alternately with muriated tincture of iron, I know of no better. Dose, 15 to 20 drops, diluted according to age. BEN. H. BRODNAX, M. D.

Brodnax, La., June 6, 1887.

Climatic Health Resorts.

Mr. Editor:—According to promise, I now write to you on the subject of climate as a resort for the invalid. I have been in Deming, New Mexico, most of my time since I last saw you; and while I admit that the climate of that country is better than the one I left behind me for very many rea-

sons—especially for its dry atmosphere and high altitude—yet the change of temperature from night to noon-day is very great, and an occasional wind or sand storm a still greater objection to it for sick people.

Phœnix, Arizona Territory, is a booming and remarkably healthy place of about 5,000 people, where the change of temperature is not great, and where the winter climate is delightful, but very hot in summer.

Los Angeles, California, is a nicer climate than either of the above places, but is too cool mornings and evenings for comfort, and rather warm in midsummer; while San Diego, California, is much more perfect, as regards temperature, pleasure, and comfort, all of which produce good health, and it is therefore considered by its inhabitants as the very mother of desirable climates; for

> The goodness of the air is better known
> By experience than by signs.—*Bacon.*

As the traveller leaves Colton, California, by railroad, and approaches this place, and if the season is spring, as it was in my own case, his senses will be regaled with a scenery at once diversified and beautiful. As he travels southward, there is a long succession of rock and rills, meadows and canyon, flowers and trees, interspersed with thriving settlements, until the broad Pacific comes into full view at the pretty little town called Ocean Side. As its name implies, this embryo city overlooks the ocean from a bluff, about fifty feet above mean tide. The air comes directly from the sea, and is pure, healthful, and invigorating. The air of this entire belt of country, partly because of the ocean breezes, which constantly fan the heated soil, is particularly soothing to lesions of the lungs and mucous membrane, though there is some fog occasionally, and rain is not frequent. Rheumatism disappears, and catarrhal diseases gradually improve, until finally they are not in existence, while ozœna has a short sojourn here, and consumptives are relieved. An aphonic consumptive told me yesterday that he had resided here six months, and his voice is entirely restored. He now enjoys a fair degree of health, and has also made considerable money in real estate.

This locality furnishes rare opportunities for both comfort and pleasure—such as sea-bathing, fishing, walking, and driving on land and beach, and a varied landscape of plain and ocean, mountain and valley, upon which the eye cannot dwell without increasing interest. San Diego is on the eastern shore of the Bay, and can boast of the qualities of both a coast and inland climate combined.

Yours truly,

JAMES C. DEATON, M. D.

San Diego, Cal., June 4, 1887.

[Since the above was received, Dr. Deaton has returned to his home in this city, restored to health by his eight months' travel. He has resumed practice, much to the pleasure of his patients.—ED.]

Cases of Recurrent Scarlet Fever.

Mr. Editor:—In an abstract on page 222, June number of the *Virginia Medical Monthly*, the re-appearance of scarlet fever eruptions eight days after the first eruption, which "was more violent than at first, and ran the usual course," appears to be remarkable. I, and doubtless others, have occasionally observed a similar course, and the probability is that the "coming out" of the rash was by some cause suppressed. Experience bears me out that not only is the re-appearance of the rash, after once fading, not so extremely rare; nor is it so very seldom that a person has a second attack of scarlet fever months or years after the first, and even more violent than the first. I have seen about a dozen of the latter cases during the past ten years.

A few instances will suffice:

The two daughters of Mr. T., aged 5 and 7 years, were prostrated with marked scarlet fever in December, 1885, and passed the desquamative stage; then dropsy developed in both. Both recovered under appropriate treatment, and were dismissed well in March, 1886. In July, four months later, the older was again prostrated with a very violent scarlatina. Convulsions and general dropsy followed, with

desquamation in large flakes, and recovery was slow. One week afterwards, the younger one was prostrated as severely; anuria for three days, general anasarca, no convulsions, desquamation in large bran-like scales. Recovery rapid. Both in excellent health at this time.

The 5-year old daughter of R. had well marked scarlatina in October, 1885, and recovered in five weeks. Seven other children in the family escaped, although the neighbors' children on both sides of the house were down with well marked scarlatina. In March, 1886, the seven unaffected children "took" scarlet fever in a mild form, and passed through the different stages without any trouble, while the 5-year old child was again prostrated, with pulse 160, temperature 106°, suppressed urine, violent convulsions, dropsy, and desquamation in large flakes, during the fourth week of the disease; recovery very slow; perfect health at this time.

In my sixth year, my parents say, I was sick for weeks of a severe scarlatina, and in my twenty-seventh year another severe attack, to which my teachers can testify, placed me in bed; and after the usual desquamation, it was nearly a year before I was fully restored.

In conclusion, I wish to say that the re-appearance of the rash within two weeks after the first appearance, is not so very uncommon, and that a second attack of scarlatina is by no means so very rare, as many physicians can testify from their own experience. Yours, &c.,

H. P. WENZEL, M. D.

Milwaukee, Wis., June 20, 1887.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D,, Theological Seminary, Va.

Natural Eucalyptated Honey.

Dr. Thomas Caraman, in a paper read before the Académie de Medecine, January 25th, 1887, (*Le Progrés Mèdscal*, April 16th, 1887,) says that on May 25th, 1884, M. E. Guilmeth, the French explorer and naturalist, then in Tasmania, in the centre of Australia, came upon a large opening traversed by a shallow stream of water, upon

the banks of which grew eucalyptus trees of from 260 to 390 feet in height. He noticed in the topmost branches of one of these trees an odd-looking dumpy hut with a dome-like roof, whose brownish exterior recalled the mud-coverings of our own country. It was 3 P. M., and the thermometer stood at 64° F. in the shade. Unable to make out what it was, and it being impossible to climb the tree, he determined to wait and watch. About 4.30, he heard a continued far off buzzing sound and saw an immense swarm of black insects, smaller than our bees, flying around an opening in the hive. These bees were of a kind unknown to him. He had seen the Australians when sick sweeten their beverages with a kind of honey which had not attracted his attention. Consequently, the discovery awakened his interest, and he set two carpenters to sawing down the tree, which was finished the next day. The tree was nearly 23 feet in diameter. When the tree fell, M. Guilmeth and some of his attendants, having covered their faces and hands, advanced towards the hive beating upon the tambourines of the country. The queen soon flew away followed by most of her subjects. M. Guilmeth examined the honey, and found that it was charged with the active principles of the eucalyptus. He collected 3,500 kilogrammes of honey. He has cut down trees in which were hives or nests weighing 6,000 kilogrammes and yielding 5,000 kilogrammes of honey.

We have not been able to find a description of this black bee. He calls it the *apis nigra-mellifica.* It is black and small; its tongue or trumpet appears to be much more developed than that of our working bees of France and Algiers. He has attempted without success to domesticate it in Tasmania. It has also been attempted to make the bees of Algiers swarm in the neighborhood of eucalyptus plantations, and by this rational means to obtain a particular honey. The native bees, however, when they have access only to the flowers and leaves of the eucalyptus, die one by one.

When passed through a medium seive at a temperature of 68° F., the honey presents the appearance of a rather transparent, syrupy, thick, homogeneous liquid of a deep orange color. Its odor, *sui generis*, reveals immediately its nature and special composition—plainly that of the eucalyptus. It is very soluble in water, milk, and the native wines, but much less so in alcohol. Its fermentation is very difficult on account of the large proportion of sugar, about 612 grammes to the kilogramme.

It contains to the kilogramme, reducent sugar (principally leuolose), 611.6 grammes, water 215.6 grammes, active principles (eucalyptol, eucalyptene, terpene, cymol, odorous, resinous and coloring matters), 171 grammes. Its density is 1.44.

A striking fact is the enormous quantity of absolutely pure sugar, and the contained active principles, giving the honey an almost inappreciable therapeutic value. The eucalyptol as extracted from this honey is a white, slightly amber-colored liquid, and almost opaque. The other principles form a grey-brown, opaque mass with a special odor, which differs from that of the eucalyptol. An attempt to make an artificial honey by combining the principles in the same proportion as indicated by the analysis with the honey of Narbonne failed entirely.

In experiments upon animals, the honey produced a marked and quite lasting reduction of temperature. Upon man in good health, it produces the following effects: A tablespoonful taken in a little hot water or milk makes a delightful drink; a few minutes after taking it an agreeable glow pervades the whole system. In half an hour a portion of the active principles begin to be eliminated by the bronchi and larynx, and the voice becomes clearer and more sonorous, and the breath perfumed. It seems, also, that the lungs are more elastic, more supple. If the honey is continued in tablespoonful doses 4 times daily for a week, the weight increases considerably, as also do the powers of endurance (lung power). At the same time, there is a slight diuresis with augmentation in amount of urea, with a pronounced odor of the urine like that of the cassia rather than of the violet.

Physiological action.—1st. The natural eucalyptated honey is a valuable aliment, containing as it does 612 grammes per 1,000 of pure sugar, and may replace cod-liver oil in chronic bronchial trouble, and in scrofulous and strumous troubles. 2nd. It is anti-catarrhal and a cardiac sedative, having an action upon the heart like digitalis. Upon the bronchial mucous membrane it acts as a moderator of the secretions and as an anti-proliferator (pardon the word) of the epithelium cells. 3rd. It is a febrifuge, and, 4th, an anti-putrid parasiticide. 5th. It is anti-blennorrhagic, the active principles eliminated by the urine, acting more powerfully than copabia and oil of sandal-wood.

It may be taken in water or milk, or spread upon bread.

Locally he has used it as an injection, dissolved in the decoction of dulcamara, with excellent results.

Treatment of Certain Forms of Rebellious Epistaxis.

Prof. Verneuil, a surgeon by profession, has, however, always endeavored, when possible, to substitute the milder therapeutic measure for surgical operations. At his request, Dr. Petit, librarian-adjunct of the Faculty, has made investigation, and deposes one in favor of Galen. The *Gazette Hebdomadaire*, 1881, No. 10, p. 145 of the feuilleton, has the following from Galen: Extensive cuppings upon the hypochondriac regions will arrest nasal hæmorrhage. When the hæmorrhage is from the right nostril the cups should be applied over the liver; when from the left, over the spleen; and when from both, over both organs.

Epistaxis, when caused by neither wound nor foreign body, nor neoplasm of the nasal fossæ or pharynx, should be considered as a symptom of toxæmia, or at least, of dyscrasia. Therefore, it is necessary in treatment to give an important place to the indirectly hæmostatic internal remedies, and to attribute a secondary rôle, though without doubt a useful one, to physical, chemical and mechanical means.

Then, in *spontaneous epistaxis*, so-called, if caused by heart disease, kidney or liver disease, by fevers or malaria, he expects much better results from digitalis, ergot, quinine, etc., than from cauterization or the tampon.

In the three following cases, the remedies used were powerless, and the tampon gave no better success. Suspecting the cause to lie in the liver, he made active revulsion over this organ, with the result of stopping the bleeding. (1) *Epistaxis of intermittent form*, probably symptomatic of a cirrhosis of the liver; failure of quinine, ergotin and digitalis. Prompt cure followed a blister upon the hepatic region. (2) *Traumatic epistaxis*. Persistent hæmorrhage in spite of internal and mechanical measures. Application of a fly blister over the liver resulted in rapid cure. In this case a well marked septicæmia followed a too long retained tampon. (3) *Continued epistaxis in a subject of an old nephritis, heart disease and congestion of the liver*. Failure of all other treatment, but rapidly relieved by a blister upon the right hypochondriac regiou, with simultaneous administration of quinine.

Conclusions.—1. Latent and benign affections of the liver may cause rebellious epistaxis. 2. Revulsion by large blisters over the liver appears to be the best means of treating

these hæmorrhages. [Coming from a surgeon of the reputation of Dr. Verneuil, this paper is of interest and importance.—R. M. S.] *La Tribune Med.*, May 8, 1887.

Morphinomania and its Treatment.

A communication to the Académie de Médicine by Drs. B. Ball and O. Jennings, (*La Tribune Méd.*, April 3, 1887). For a long time distinction has been properly made between morphinism and morphinomania. By morphinism is understood all the phenomena which result from a chronic poisoning. By morphinomania we understand the vicious habit of regularly taking in ever-increasing doses the toxic stimulant. Gradually morphinomaniacs are held captive by that intolerable malaise which overcomes them when they attempt to force themselves to give up the habit. This feeling of general malaise is often accompanied by disturbances going to the verge of syncope, and may even end in death. This is the collapse described by all writers, and is present in different degrees in all patients in course of treatment. If the pulse of these subjects is studied by the aid of the sphygmograph, there are obtained tracings that exactly indicate the variations through which the circulatory functions pass. Take a patient who has been deprived of his usual dose for a time (is in the state of want), and the sphygmograph presents a plateau corresponding to the systole, and which resembles to a certain extent the tracing obtained in some cases of chronic nephritis, in aneurisms of the innominate artery, and in some other diseases. At this time there is a break in the equilibrium between the cardiac impulse and vascular resistance. All the tissues are in a state of anæmia by default, and the nerve centres are the first to suffer from this state of things. This is why the morphinomaniac, in a state of cerebral anæmia, suffers the distress caused by it. He feels himself giving way, and all his vital functions seem suspended. Now give him his dose, and in a few minutes he is comfortable. The peripheral resistance is overcome, the heart triumphs all along the line, the tissues enter into a state of turgescence, the functions are re-established, and all malaise disappears. The sphygmographic tracing indicates the normal condition of the circulation with the exception of a slight degree of arterial tension.

It is known that morphinomaniacs when deprived of their stimulant return to the normal state after a struggle more or less painful and prolonged, with the exception of neuralgic cases and the vicious. But for those who have any real motive to free themselves from the influence of mor-

phine, the problem to be solved consists in the suppression of the use of the stimulant, and to replace it with a remedy capable of arousing the activity of its circulation, and of giving the tissues their indispensable aliment. For this purpose, many different remedies have been used. Alcohol, coffee, paraldehyde, cocaine, apomorphia, chloral, vanalline, pilocarpine, and other things have been advocated; but, for the most part, they are not only useless but hurtful. The idea occurred that it would be preferable to use heart tonics and to stimulate the action of this organ at the time it begins to fail. To this end, Drs. Ball and Jennings tried the sulphate of sparteine, which fulfilled almost entirely conditions desired, and can be administered hypodermically. They watch for the moment of failure as indicated by the sphygmograph and the feelings of the patient, and then give an injection of from two to four centigrammes ($\frac{1}{3}$ to $\frac{2}{3}$ gr.), and repeat if necessary. In a few minutes the pulse rises and the malaise disappears, and as patients express it, the medicine gives them a heart.

The treatment of morphinomania is then: (1) To place the patient in a hospital where the indispensable surveillance of the physician can be exercised at any moment. (2) To stop more or less entirely the use of morphine. (3) To stimulate the action of the heart at the proper time by an injection of sparteine, to which should be added in cases of need an injection of morphine if the symptoms become too threatening. For it must not be forgotten that collapse can terminate in death, and the use of morphine immediately causes it to disappear.

We have also used nitro-glycerine, the effects from which are much more rapid, but much less lasting, coming on in a few seconds and disappearing in 15 minutes, leaving persistent headache. The medicine is administered by placing a few drops of the properly diluted preparation on the tongue, and it may be used in mild cases. This treatment, which we have often employed with good results, is applicable especially to that period when the patient, deprived of his habitual dose, suffers that distress that so often causes the resolution of the most determined to fail. At the end of some weeks the patient is cured or greatly benefitted.

[This article in the original is illustrated by cuts of the sphygmographic tracings, showing the condition of the circulation in patients in the *state of want*, after a dose of morphine, after a dose of sparteine, and after a dose of nitro-glycerine, and also a normal pulse after cure, which adds greatly to its interest.—R. M. S.]

Therapeutic Notes.

(*L' Union Méd. de Canada*, May, 1887). *Arsenated Lithia Water in Diabetes.*—Dr. Martineau, Physician to the Hospital of Louraine, uses in the treatment of diabetes the arsenated lithia water, and claims to have cured with it 67 cases out of 70. The water is prepared as follows: To 4 grains of carbonate of lithium, add a tablespoonful of the following solution: Arsenite of soda, 4 grains; distilled water, one pint. A tablespoonful contains then 4 grains of carbonate of lithium, and one-eighth of a grain of arsenate of sodium, and this quantity should be taken in 24 hours. The dose should be taken in wine during meals. The treatment should be continued two or three years after every trace of diabetes has disappeared. Dr. Martineau does not advise much modification of diet, he confines himself merely to a restriction in amount of starchy foods. This treatment has succeeded best with patients in whom there were arthritic symptoms. In the three cases in which it failed, there were no arthritic symptoms.

Opium and Belladonna in Diabetes.—It is in treatment of diabetes, too, that Dr. Villemiu has recently advised the simultaneous use of these remedies. This treatment having been successful in a case of simple polyuria, he tried it in a case of glycosuria which had arrived at a very serious stage, and received no benefit from the usual remedies. A cure was obtained which lasted as long as the treatment was continued, but the diabetes returned whenever the medicines were stopped.

Colchicine.—Drs. Mairet and Combemale presented to the Académie des Sciences the following conclusions drawn from their recent study of this alkaloid: *Physiologically*, colchicine acts as an irritant poison, acting on all the organs, but especially on the digestive tube and kidneys. Given hypodermically, it acts much more rapidly than when given by the mouth. It is eliminated by the various emunctories, and particularly in the urine; but this elimination is slow, and very small non-toxic doses may cause death inside of 5 days. It causes congestion of the articular extremities and of the bone marrow. Therapeutically, colchicine acts according to dose, as a diuretic or as a purgative, on account of its congestive and irritant action on the kidneys and digestive tube. Its therapeutic effects are the same, whether administered hypodermically or by the mouth; but, when given subcutaneously, its effects are much more rapid, and the dose necessary to produce them is less. The diuretic

dose is 2 to 3 milligrammes ($\frac{1}{32}$ to $\frac{1}{21}$ grain); and the purgative dose is 5 milligrammes ($\frac{1}{13}$ grain). Colchicine augments the amount of uric acid excreted, and produces on the articular surfaces and bone medullæ congestions giving rise to two sorts of effects that are of some interest to compare to the purgative effects to account for the mechanism of the action of this alkaloid in some diseases, gout especially. It decreases the quantity of uric acid in the blood, and causes a substitutive irritation on a level with articular surfaces. But, its tendency to accumulate in the economy, and its great toxity render great caution necessary in its employment.

Subcutaneous Injection of Mercury in Syphilis.—An Italian physician, Scarenzio, recommends the subcutaneous injection of an insoluble preparation of mercury which becomes slowly and progressively soluble, in such a manner that the patient remains for some time under the influences of the remedy. M. Balzer has tried the method and derived service from it. The dose of calomel for each injection varies from $\frac{2}{3}$ to $1\frac{2}{3}$ grain. With proper precaution, local troubles are avoided. Finally, experience has appeared to show that 4 or 5 injections are sufficient to cure a case of syphilis.

The Role of Silica and the Silicates in Mineral Waters.

In an article in the *Journal d'Hygiène* of the 19th of May, 1887, Dr. Macario (of Nice), writes at length on the silicated mineral waters. He assumes in beginning the theory that almost all diseases are caused by a specific germ, and the proper treatment to be the use of a germicide. Next comes the difficulty of finding a sufficiently powerful germicide which will not injure or kill the patient, and in the meantime we may avoid all danger by the use of those mineral waters whose active principles are fatal to microbes. The silicated waters possess this power to a high degree, the principal of which are the Eaux de Plombiens, d'Eaux d'Arlanc, and specially the silicated waters of Sail-les-Bain, (Loire). The study of these waters, and most especially those of Sail-les-Bain have showed that they poseess powerful anti-fermentic properties, which are due to alkaloid silicates. Various experimenters have shown that the silicate of soda arrests alcoholic, amygdalic and sinapisic fermentations. Rabuteau and Papillon (in 1873), after enumerating the clinical results obtained by M. Sée, Dubreuil and others state: "The silicate of soda destroys in a variable time, whether under the microscope, in the laboratory, or in the system, pus globules, microscopic parasites and the particles and or-

ganized corpuscles which cause corruptions of all kinds, and this too in very small doses." About the same time, Picot read a paper before the Académie de Médicine on the same subject, in which he said: "Silicate of soda in small quantity arrests putrid and other fermentations; it opposes the fermentation of the glucose of glycogenic material of the liver, and by consequence, is very useful in diseases of this organ and also in diabetes; it has, too, a still greater efficacy in the treatment of discharges from the genital organs of male or female patients." The waters of Sail-les-Bain owe their properties to anti-fermentescible action of the alkaline silicates.

The scope of their therapeutic action is known, and comprises the class of chronic parasitic diseases, and the morbid manifestations (wounds, engorgements, irritations, etc.), always caused by the presence of a parasite.

The synoptical table of observations collected during 7 years by Hugues and Baranger furnish instructive lessons upon this subject. Of 1,023 cases of diseases of the skin, 568 were cured, 328 benefitted, and in 127 there was no result. In cases of ulcers, engorgements and catarrhs, in chronic metritis, there were 96 cures, 84 ameliorations and 20 negative results. In cases of Bright's disease there were 9 cures, 13 ameliorations, and 3 failures. A great number of other cases show amelioration in diabetic patients, and marked good effects obtained in gout, rheumatism, albuminuria and calculi. Dyspeptics were benefitted by the sedative action of the water upon their nervous troubles, which is attributable to the great quantity of contained nitrogen gas and the gelatinous silica held in solution.

Analyses, Selections, etc.

A Monstrosity.

Dr. J. Emmett Blackshear, Macon, Ga., reports (*Atlanta Med. and Surg. Journal*, June, 1887) the case of Mrs. F., aged forty, of good health, to whom he was summoned for threatened abortion. She had passed the seventh month of pregnancy, and had been suffering with labor pains for six hours before the doctor's arrival. Before an examination could be made, a pain came on, and a male monster, resembling a frog more than a human being, was born, and

weighed three pounds. There was no neck, and the ears and eyes were near the upper border of the head, the top of which was flattened. The right arm and hand were normal, except that the thumb was turned backwards. The left arm terminated at what should have been the elbow, with an attempt at the formation of a hand with only three fingers. The lower extremities were very well formed, except some distortion of the toes. Drs. Fuller and Green assisted in the dissection, which revealed entire absence of the spinal cord and brain. The spinal column, the pelvis, the ribs, clavicle and scapulæ were cartilaginous. The bones, nerves and blood-vessels of the extremities were normal, except that the left arm was wanting. All of the viscera were rudimentary, save the liver, which was of immense size, occupying the entire abdominal cavity, and the kidneys were much enlarged. The larger portion of the intestine was contained in the left side of the thoracic cavity, pushing the heart to the right side. There was no connection between the heart and lungs. The writer thinks that no satisfactory explanation can be offered for so wild a freak of nature. The mother stated that there had been no unnatural longings, nor had she received any fright or nervous shock whatever that could impress the child in utero.

Should Medicines be Administered Before, With or After Meals?

Dr. J. Edward Green, Macon, Ga., writes (*Atlanta Med. and Surg. Journal*, June, 1887) that as all medicines are poisons to a certain extent, and that as they do, in most every instance, set up abnormal action in the human system, it is better, as a rule, to administer them upon a full stomach. Especially does this apply to two great classes of remedies—those which are constructive in their action, and those which act as irritants. It will readily be seen how the remedies of the latter class, coming in immediate and direct contact with the branches of the pneumogastric nerve, set up violent convulsive action of the whole alimentary canal in order to expel the offending material, thus frequently eliminating the substance before it has had its effect on the system. The author states the effects of opium and alcohol, taken on a full, and on an empty stomach, as illnstrations of the points in discussion. As regards tonics, the writer says, that it will hardly be disputed that the best time for their administration is after eating; for, given on an empty stomach, they excite an excessive flow of the gastric juice,

which, having nothing upon which to act, is either re-absorbed, or does positive injury by its corrosive influence on the mucous membrane. Of this point, iron and arsenic are referred to as illustrations. Cod-liver oil is best given on a full stomach for two reasons—1st, When ingested while the organ is empty, it irritates the pneumogastric nerve, which promptly causes its expulsion. 2d, The gastric juice exerts little or no solvent power on pure oily matters, and consequently the effect is *nil.* One more point: In order to effect a certain organ or locality, it is necessary that the remedy should permeate the whole system. This cannot be accomplished when irritation is set up to such a degree as to cause the expulsion of the medicine by the stomach or bowels before it is absorbed. Iodide of potassium in syphilis is cited as an illustration. To sum up, it may be stated that all medicines which are irritant in their action, all constructive agents, all alteratives, all remedies which are to be thoroughly carried into the system, and *par excellence* all alcoholic stimulants, had better be given with or just after meals.

Therapeutic Notes from My Practice

Is the title of a paper by Dr. J. S. Todd, of Atlanta, Ga., in which the following facts are stated, as the result of the author's personal observation. Noting the periodicity of the attacks of *infantile colic*, and their non-attendance with fever, the doctor concluded that the affection was neuralgic, and decided to combat the disease with the great anti-periodic, quinine, which treatment was followed by the happiest results in the eight cases in which he has used it. The following is the formula used:

℞. Quiniæ. sulph.....grs. ix
Hydrarg. chlor. mit.....grs. iij
M. Make nine powders.
Sig.: One at 9, 12 and 3 each day.

In *hepatic colic*, Dr Todd has used *diascorine* with the best results; in fact, he considers it a specific for that malady. He says, it increases the pain-relieving power of opium during attacks, and if continued, will prevent their return. He reports the case of an eminent judge, in his State, who, despite the best medical advice, was fast failing with frequent attacks of this excruciating complaint. Acting under the advice of a friend, he took the fluid extract of wild yam, and from the beginning of its use, he dated the end of his trouble. As to the use of *fluid extract of ergot in internal hæmorrhoids*, Dr. Todd states that cure was effected in six

out of eight cases, by simply throwing into the rectum, twice daily, a mixture consisting of fluid extract of ergot and hot water, each one drachm, and ten drops laudanum. [This treatment was a great favorite with Dr. G. Wm. Semple, of Hampton, Va., for ten or fifteen years before his death—some years ago. Notes of some of Dr. Semple's cases were reported in the earlier numbers of the *Virginia Medical Monthly.*] *Poke root* is considered by the doctor to be a most valuable remedy *in mammary abscess.* He believes it to be a true anti-galactagogue, to which property is its remedial effects due, giving rest to the breast, as does the surgeon's splint to the fractured limb. The fluid extract of the drug is administered in ten-drop doses every hour for three or four hours, after which the intervals are lengthened gradually, *pro re nata.* Failure to abort threatened abscess he records in one case only. For lessening the secretion of milk, the author has found it an unfailing remedy. *Mistletoe* is the only drug that *will increase the natural,* rhythmical, intermittent *contractions of the uterus.* Ergot, the doctor says, does not do this, the contractions produced by it, being non-intermittent, persistent, not remittent. He speaks well of Rockbridge alum water in *dysentery.—Atlanta Med. and Surg. Journal,* June, 1887.

Some Cancer Cases Cured [?]

Under this heading, Dr. M. E. Poynter, of Midway, Ky., recites (*S. W. Med. Gazette,* June, 1887) some clinical experiences, with a full consciousness of the criticisms that may be passed upon his reports, indicating the medicinal virtues of the Eureka Springs, Ark., as beneficial in cancerous affections.

Manganese Salts for Vicarious Menstruation.

Dr. F. W. Samuels, of Louisville, Ky., reports (*S. W. Med. Gazette,* June, 1887) the case of Miss ——, aged 18, robust and healtby looking, who had "smothering spells," resembling fits more than dyspnœa. He raised her to the sitting posture, when a slight sudden gush of blood came from her mouth, which relieved her distress. She had a hacking cough afterwards, and continued to spit blood for some time. About eleven months previously, the day before her period, she was caught in the rain, and the temperature changed to chilliness. She took toddy and retired, feeling badly. Next evening she had some pain in the back and pelvis, but no menstruation. Under a doctor's prescrip-

tion, about ten days later, her flow came on, and so with the following period did she suffer. But the last five periods she had dyspnœa and spitting of blood. There was no phthisis, but just over the sternum large mucous râles were heard moving about during the time her sickness should come on, but not at other times. No other sign of disease existed. Hence the diagnosis of vicarious menstruation. He ordered potash permanganate, gr. ij., every six hours, with an anodyne cough mixture; in 36 hours, her courses were "all right," and she was entirely relieved of all her trouble. She was directed to take her medicine three times daily for four days before each period. She has been well since.

"Renal Colic, Parasitic and Calculous,"

Is the title of "a criticism," by Dr. J. B. Marvin, of Louisville, (in *Southwestern Med. Gaz.*, June, 1887) of a report made by Dr. J. A. Larabee of a supposed case of "kidney worm, of the strongylus gigas family." Dr. Marvin, after a careful microscopical examination, supported by an examination also made by Prof. Leidy, of Philadelphia, thinks it simply an example of a stringy, fibrinous clot of blood, passed per urethram, as a result of the irritation of the passage of some renal calculi; and calls attention to Eichhorst's caution, that strongylus gigas "is apt to be mistaken for clots of blood and ascarides."

Carbolic Acid and Blood as a Wound Dressing.

Dr. T. T. Beall, of Vicksburg, speaks highly (*Miss. Val. Med. Monthly*, June, 1887) of the "efficacy of the mixture of crude carbolic acid and blood applied to fresh wounds," and cites some illustrative cases from his practice. Not long ago this dressing was widely heralded and highly lauded; but of a sudden the journals ceased to mention it, without offering a worthy substitute, unless it be iodoform. But in fresh wounds—only a few hours old—where the blood is still oozing so that septic germs of the atmosphere are swept off, the mixture of crude carbolic acid with blood forms an application which "stands without a rival." Of course, "there must be no septic fermentation already begun in the wound." If there be *any* doubt about this, first sponge the wound thoroughly but gently with a three-per-cent. carbolized solution (using no excess of water) just before applying the dressing, taking care, however, to see that enough blood is flowing to fill all the interstices of the wound; even let any

cup-like depressions, owing to loss of fleshy substance, also be filled up with the flowing blood. To insure success, the dresing *must* come in contact with and cover living organizable tissue and pure fresh blood. If he can secure a firm implantation over the wound, and adhesion to the sound skin for an inch or two beyond its outlines, so as to form an air-tight covering—premising always that circulation enough remains to nourish the involved structures—he is confident of a successful issue, "regardless of the extent or character of the wound, even though bones have been laid bare and articulating surfaces of a joint exposed." This method is as follows: Some *fresh* blood is smeared upon the sound skin, after the usual way, for an inch or more beyond the wounded area. Upon a thick batch of lint cotton, wide enough to embrace the wound and the blood-besmeared skin, another portion [of blood] is mopped up; and upon this, crude carbolic acid is spread. The cotton batch, thus prepared, is quickly applied, and firmly secured by a roller bandage. "Do not remove the dressing until the wound is practically healed."

Treatment of Malarial Hæmaturia Based on Its Etiology and Pathology.

In an inaugural dissertation, Dr. T. J. Wilson [P. O. not given] says (*Miss. Val. Med. Monthly*, June, 1887) there seems to be no doubt of the malarial origin of malarial hæmaturia. As to the pathology, he believes "the walls of the blood-vessels become weakened from defective nutrition," induced by prolonged malarial influences, and "consequently more liable to rupture;" and "the heart is weakened from defective nutrition." Internal congestion is the pathological condition; but *why* "certain organs suffer more than others, we are unable to explain." The cold stage may often be arrested by a full dose of chloroform. Opium in some form (he prefers Dover's powders, because of diaphoretic effect also) should be used to quiet nervous symptoms. Cerebral congestion is probably best allayed by bromides and chloral. Calomel (gr. v–x) is the best remedy to relieve congested bowels and liver. Copious enemata of warm or cold water, according as the body temperature is high or low, helps to reduce the congestion of the kidneys. Pilocarpin is good to excite skin action. Digitalis may be needed to strengthen heart's action. Strychnine is a good vaso-motor tonic. Ergot and sulphuric acid act beneficially by diminishing the calibre of the renal blood-vessels.

Astringents are not indicated until congestion is relieved. Friction, irritants and warmth to the surface are useful by diverting the blood from internal organs. Combat high temperature with antipyrin. But chief reliance must be placed upon quinine in large doses to cure the disease—to remove the malarial poison. [There is enough therapeutics in the above to keep patient, nurses and the doctor in a profuse sweat.]

Paralysis Complicating Intermittent Fever.

Dr. Ben. H. Brodnax, of Brodnax, La., reports (*Miss. Val. Med. Monthly*, June) the case of Mrs. ——, aged 26, recovering from erysipelas. May 1st, while crossing a hall, she staggered and came near falling, being in a fainting condition. Left hemiplegia followed, but face not drawn; pain began about the ear, and extended over half the head. From other usual symptoms, diagnosed chills and fever as the cause. Gave calomel and quinine, four doses every hour; also gave chloral, 5 grs , caffeine, 1 gr. In a few hours after these doses, all signs of paralysis had disappeared, except a slight "sleepy feeling in the side and arm. Ordered quinine and iron to prevent paroxysm the next day. Put her on iron and Fellow's hypophosphites as a tonic, and she was well in a week.

Treatment of Typhoid Fever.

Dr. W. M. Vertrels, of Nashville, states (*South. Prac.*, June, 1887) that the treatment is purely symptomatic. No medicine yet tried has any control over the disease itself. The protracted exalted temperature is the pronounced symptom to treat. This is to be controlled by water, by alcohol, and by the proper quantity and quality of food. Cold water abstracts heat, and if applied long enough, prevents its reaccumulation in the system. The temperature should not be allowed to increase over 4°F. While this does not relieve the causes, it removes the consequences. Alcohol supports the system and lessens the temperature, and, hence, like water, should be used from the start, if it does not increase the headache. It should be given with nitrogenous food, eggs, milk, etc. According to Liebig, alcohol is a hydro-carbon, and if, combining with oxygen that it finds in the system, it supplies a source of combustion for the elevation of temperature which seems a necessity, and in this way prevents the waste or metamorphosis, is it not as good as a food? Alcohol needs no digestion, no assimilation, but

enters the circulation as alcohol, and is oxydized, and creates heat. But this heat is acquired, and is not at the expense of the stored up supply of the system. Food, also, should be continued from the beginning in as large quantities as the patient can take.

Staphylorrhaphy and Perineorrhaphy Successful in the Same Patient.

Dr. J. B. W. Nowlin, of Nashville, reports a case of this kind (*South. Prac.*, June, 1887). Mrs. D., during the last year, had become very nervous, and suffered headaches, backaches, and severe hæmorrhages at menstrual periods. The uterus was found enlarged, tender and retroverted, with double cervical laceration, extending down the vagina on one side. There was also a deep laceration of the perineum extending half through the sphincter ani. A large rectocele also bulged forward and protruded through the vaginal wall. April 27, assisted by Drs. D. J. Roberts and J. T. McColgan, Dr. Nowlin proceeded to close the cervix. Patient under ether, in lithotomy position. Uterus was drawn down to the vulva with volsella forceps; a wire loop in a wire ecraseur was placed around the neck, slipped up as far as possible, and moderately tightened. Edges of laceration freshened with knife and scissors. All cicatricial tissue was removed, and cysts of Nabothian follicles were ruptured. Four silver wire sutures, two on each side, were planted with a short curved needle, and closed the freshened surfaces. Slightly borated hot water injections daily, quiet in bed, and milk diet completed this treatment, without acceleration of pulse or rise of temperature. Union complete, and sutures removed May 4th. On this same day, with Drs. Roberts, McColgan, and J. M. Lindsley's assistance, after anæsthesia, he operated on the perineum according to Emmet's plan. In eleven days sutures were removed, and union was complete, with the uterus restored to normal size and position.

Malignant Tumors.

Dr. J. E. Kintz, of Somerset, Ohio, concludes his notes of Dr. Gaston's lecture on this subject (*South. Med. Rec.*, June, 1887). As to *diagnosis*,

Epithelioma occurs at the junction of the skin and mucous membrane, or upon either of these structures; it originates as a crack or fissure, or wart-like excrescence; it is very firm, grows slowly, is of small size, and for a long time it is without pain or constitutional taint.

Melanosis. Principal sign is peculiarity of color.

Colloid may be compounded with fibrous and enchondromatous formations.

Encaphaloid, as compared with scirrhus, is soft, elastic—uot uniformly, but more so at some points than at others; grows rapidly, and soon becomes large; pain is slight until ulceration begins; veins always markedly enlarged; ulcer is foul and fungous, with thin undermined and livid edges, and frequently bleeds; lymphatics generally soon involved; occurs at all ages of life; is most frequent in the eye, testicle, mamma, lymphatic ganglion, bones and cellular tissue; usually fatal in from nine to twelve months.

Scirrhus is uniformly hard and inelastic; grows slowly, and bulk is comparatively small; distinctly localized pain begins early, and is sharp and darting; veins usually normal; ulcer is encrusted with spoiled lymph, has steep, abrupt edges, and bleeds very little and not often; lymphatics not involved till late; seldem occurs before age of 40 or 45; never occurs in eye or testicle, and seldom in lymphatics or bone; seldom fatal sooner than 18 or 24 months.

Extirpation, if practicable, is the best treatment of all cancers.

MacEwing's Radical Hernia Operation Modified.

Dr. Charles N. Jones, of Brooklyn, N. Y., furnishes the *Southern Medical Record*, June, 1887, with notes of two modifications of MacEwing's operation for the radical cure of hernia he has lately tried. *Case I*, Laboring woman; *inguinal hernia.* Czerny's operation performed in March, 1886. Six months later, small hernia returned in the cicatrix. Determined MacEwing's operation; but the new sac was so thin and adherent in the line of the cicatrix that, in attempting to enucleate it, he opened into the peritoneal cavity several times. He then made an elliptical section of the whole abdominal wall, through the peritoneum, including the seat of the hernia sac—performing a true laparotomy. He then united the peritoneum by a continuous catgut suture. The important part of MacEwing's operation is the uniting of the fibrous aponeurotic structures in a valve-like manner. Instead of using MacEwing's needle, mounted on a handle, Dr. Jones used a suture of catgut with a needle threaded at both ends. Both needles were then passed from within outward through the internal pillar, and then through the external pillar; four sutures thus passed, were tightened and tied. Poupart's ligament over-

lapped the conjoint tendon in a valve-like manner, and thus secured a broad surface for union. The superficial structures were then united with catgut sutures, and the whole seat of operation firmly matted together by a number of buried sutures, after Martin's darning method. There is no sign of return of the hernia. *Case II, Umbilical hernia* in woman; developed eight years ago; became inflamed and irreducible six weeks ago. Made vertical incision down to the sac; separated tissues from margin of the tendinous ring; opened sac; separated, ligatured and excised adherent omentum; sutured margin of peritoneum at level of abdominal parieties with continuous catgut sutures; inserted three rubber drains; applied antiseptic dressing; removed dressing on eighth day; primary union resulted; bowels moved naturally on fourth day. Recovery.

The radical operation is justified in irreducible and congenital herniæ, large herniæ which cannot be retained by the use of a truss; all painful herniæ, and herniæ existing in those whose occupations subject them to strangulated hernia. The operation should be performed rigidly antiseptically. It is, to all intents and purposes, an abdominal section.

The Work of Micro-Organisms,

Is the title of a paper by Dr. Hiram Christopher, of Missouri, in *Southern Medical Record*, June, 1887. The fundamental position taken is, "that morbific agents are the excreta of living organisms, whether these be micric or macric. Putrid blood, from which ptomaines were obtained, was made putrid by the ptomaines, the excreta of micro-organisms; and the secretions of healthy persons furnished ptomaines only after micro-organisms had developed in them and excreted these poisonous substances."

Management of Second Stage of Labor.

Dr. J. T. Wilson, of Sherman, Texas, says (*Texas Cour. Rec. Med.*, May and June, 1887), authorities advise that ordinarily nothing should be done except to watch. Make examinations as seldom as possible. Some teach that after complete dilatation of the os, the bag of water should be ruptured; but Dr. W. thinks with many that the unruptured bag is useful in dilating also the vaginal canal and outlet; it is certainly less painful. After the waters have broken, and the head engages in the inferior strait, he prefers keeping the patient in bed. The position of the patient

in bed seems immaterial, though the English position—lying on left side, with body slightly curved forward—is generally preferred.

The practice of "supporting the perineum" while the head is passing, so popular a few years ago, is now generally condemned. Now, instead of "supporting the perineum," the advance of the head is retarded as much as possible, so as to allow of more perfect dilatation of the vulva, etc. Forced flexion, to shorten the sub-occipito-bregmatic diameter as far as possible, as the head passes through the outlet is advocated. This action depresses the occiput so that it glides under the pubes. When it has engaged there, it is then pressed up against the symphysis. The perineum is pushed forward along with it, in order to produce as much relaxation as is attainable, and extension is gradually and gently assisted as the face emerges into the world. He specially commends Dr. Thomas' method of retarding extension of the head with one hand, and pushing the occiput downward to the fullest extent with the fingers of the other hand covered with a towel. This diminishes occipito-bregmatic diameter, and avoids rupture of the perineum as the occiput escapes under the symphysis. When he can count on a short sub-occipito-bregmatic in place of imperfect sub-occipito-bregmatic diameter, then he allows and assists extension. Dr. Williams does not think the patient should bear down when the head is about to be born; she should refrain from it as much as possible, in order to gain time for proper vulvar dilatation. Let her keep her mouth open during pain, and thus hold in check the voluntary muscles. Chloroform is a valuable agent in this stage—especially in primiparæ. It diminishes suffering, lessens the force of uterine contractions, relaxes tissues and thus helps dilatation, and prevents voluntary muscular action. Administer it with great judgment at the beginning of each pain and withdraw it at the conclusion. Expulsion of the body should be left entirely to the contractions of the womb, unless some emergency arises. Support the head up towards the symphysis during restitution, and see that the shoulders present in the longitudinal direction, supported and pressed up as they pass through. Do not relax vigilance until the entire body is delivered. He once had slight perineal laceration from the passage of the hips.

Live Birth—Medico-Legal Case.

Dr. J. T. Musick, of Pittsburgh, Texas, reports (*Texas*

Cour. Rec. Med., June, 1887), the case of a dead infant found behind a hotel. No sign of violent death. Autopsy revealed lungs that had been inflated to *almost* their full capacity. A section floated well upon water; on squeezing it under water, bubbles of air rose to the surface. Funis torn off about 4 inches from navel and not ligated, but the bloodvessels of the infant generally were distended with blood; hence he does not think the child bled to death. The mother confessed to the illegitimate birth, but stated that it was "still born." Dr. Musick correctly testified that it was possible for a child to breathe after the head had passed the vulva, the body still occupying the utero-vaginal canal, so as to inflate the lungs, and yet be a "still-birth." To sustain his point, he quotes from Wm. Hunter on "Uncertainty of Signs of Murder in the Case of Bastard Children," page 33; Stillé & Wharton "Medical Jurisprudence," Vol. III., page 137; "Legal Medicine," Tidy, Vol. III., (Wood's Library of Standard Medical Authors, 1884); Taylor's "Jurisprudence," pages 569 and 575.

Case of Placenta Prævia.

C. M. Ramsdell, A. M., M. D., of Lampasas, Texas (*Texas Cour. Rec. Med.*, June, 1887), was called 9 miles to a lady, (æt. 40 years, previous labor 13 years ago, numerous miscarriages in the meantime, and had prolapsus uteri as a result), whom he found in bed pale, with cold extremities, sighing respiration, faint, rapid and compressible pulse. Labor at nearly full term set in a few hours before, with profuse hæmorrhage, which she had checked by taking a dose of a mixture she had in the house, containing ergot, erigeron, canadensis, laudanum and cinnamon. She had been having hæmorrhages for three months—off and on. Os was now patulous and blood was trickling through it. A detached portion of placenta presented through a very partial dilatation. A raw cotton tampon was applied, and the vagina packed. Morphine to control pain was given. This tampon was removed in 24 hours and a new one applied—pains not having returned. But the os was dilated to about the size of a silver quarter of a dollar. Twelve hours later severe pains had come on, and hæmorrhage saturated the tampon. The cervix was soft, but not much dilated. Every pain caused free hæmorrhage, and their frequency and severity contra-indicated further temporizing. Dr. R. O. Smith gave chloroform and Dr. Ramsdell dilated with his hand, so that in about fifteen minutes he introduced his whole hand,

and attempted to detach the placenta from one side, push it over, rupture the membrane, and extract; but the placenta being large and about centrally located, he failed. He then detached the placenta all around as far as possible, made an opening through the placenta and delivered by the feet. During the operation the hæmorrhage was fearful. The secundines were delivered soon after the child, and hæmorrhage ceased. Still birth. Mother had fever for a week, and recovery protracted by sciatica. It took her over two months to get well.

Reflex Irritations of Deformities of Nasal Septum and Hypertrophied Turbinated Bones.

Dr. J. H. Smith, of Dallas, Texas, gives a critical review of so-called advances on this subject (*Texas Cour. Rec. Med.*, June 1887). Hack discovered that migraine, hay-fever, asthma and other neuroses are reflex diseases, originating in the nose. Schaffer and Frank found that an over-sensitive membrane from attacks of catarrh might be starting points of these reflex neuroses; so that Hack, by touching the turbinated bones of a sensitive person, could produce spasm of the glottis. He also found that there is a true and a false hypertrophy of the nasal mucous membrane—one hard and unyielding; the other, a transitory swelling. The cavernous tissue of the middle and inferior turbinated bones become engorged from various irritants, and act as storehouses for reflexes, to be distributed to different tissues. The natural conclusion was that destruction of these nasal hypertrophies would destroy the reflexes. Dr. F. H. Bosworth, of New York, dates the starting point of many nasal deformities as due to slight injuries in childhood—then so slight as to be overlooked and afterwards forgotten. Dr. Smith has often found snch deviation, especially of the anterior nasal portion, in very young children brought to him for catarrh. Especially in the older class of patients, he has been struck with the one symptom—alternating stenosis of the nasal passage. Bosworth regards it as pathognomonic of deformity of the septum. Sometimes, in the recumbent position, the side of the nose nearest the pillow will close and its fellow remain open—due to muscular weakness of the coats of the bloodvessels, the diminished atmospheric pressure beyond the obstruction causing chronic congestion. A tendency to nose bleed upon the slightest provocation is also common—the bleeding coming from an eroded surface far back. Bosworth believes that this nasal stenosis is a prime

factor in producing hay-fever and asthma, and that on account of the sympathy between the mucous membranes in the two localities, hay fever is apt to be followed by asthma. In hay fever, there is paralysis of the vaso-motor control of the blood supply to that part of the nose which results in an increased out-pour of watery serum. In cases of high degree of hyperæmia of the nasal cavity, Dr. Smith has often to apply cocaine before further medication can be carried on. Often the simple passing of a probe, armed with cotton, to the post-nasal region produces glottic spasm, accompanied by a short, sharp cough. Nasal stenosis often causes bronchial and tracheal troubles. He believes also that some forms of deafness are due to the same cause. As to treatment, Bosworth cocainizes the part, and removes the projecting tissues with a nasal saw he has devised, with a blade three inches long, and set in a handle at an angle of 45°. Dr. Smith, in treating hypertrophied turbinated bones, prefers applications of chromic acid. When they have projections large enough to take hold of, he uses forceps and scissors, and removes no inconsiderable amount of hypertrophied tissue. When the surface heals, the cicatrix reduces the enlargement to an almost normal size. Dr. Rumbold first uses a spray [of what?] with his hay fever patients; but if no improvement, he uses a Jarvis' snare to remove the hyperæsthetic mucous membrane over the turbinated and portions of the septum nasi. He locates the spots by a mirror introduced through a nasal speculum. He then inserts a slightly bent probe, after the manner of Dr. Roe, and touches the most sensitive spots, producing a burning sensation.

Hypnotic for Insomnia of Insanity.

Dr. J. S. Dorset, Superintendent of the Texas State Lunatic Asylum, in Austin, states that (*Texas Cour. Rec. Med.*, June, 1887), in some rare cases opium and chloral seems almost indispensable. But generally speaking, he finds the following formula, (compounded by Parke, Davis & Co., of Detroit, Mich.), a most admirable substitute:

℞. Hyoscine hydrobromate..... gr. $\frac{1}{50}$
Paraldehyde..... .....
Oil of almonds.....$\overline{aa}$ ʒij
Chloroform..... ..... minims x
Oil of cinnamon..... minims ij
M. S: Two doses.

In a great number of cases, drachm doses at bed time

secure quiet, refreshing all night's sleep, and the patients are not so nervous the next day and take a good breakfast. He specially recommends this formula to superintendents of insane asylums. Messrs. Parke, Davis & Co. promise to give advantage of any decline in the market as to the item of cost.

Gaseous Enemata for Consumption.

Dr. C. A. Parker, of Fort Worth, Texas, says his forty days' experience (*Daniel's Tex. Med. Jour.*, June, 1887) in six cases—four being of phthisis pulmonalis—has been most gratifying—better than anything yet tried. *Case I.*—Miss ——, aged 20; father, brother and sister died of consumption. Had been treated for some time by usual remedies. Vesicular respiration almost extinct over entire right lung, and upper lobe of left lung seemingly hopelessly gone; profuse night sweats, and œdema of lower extremities; pain and nausea on ingestion of food; temperature from 102° to 103.5°. The first gaseous administration gave a feeling of well being—better than she had felt for months. After second enema, night sweats stopped. Daily enemata were continued. In ten days she was much improved, and gained in weight at the rate of from 24 to 42 ounces each week. Swelling left extremities; strength rapidly returned; digestion became natural; cough almost entirely cured; expectoration reduced from about 30 ounces daily to 2 or less; and at end of forty days dresses and takes daily walks with ease and very little fatigue. *Case II.*—John ——, aged 19; father died of consumption. Temperature 103.5°; respirations 40 per minute; profuse night sweats; cough continual; diarrhæa. Right lung and portion of left involved. Diagnosis, incipient galloping consumption. From first injection has rapidly improved, and has gained 40 ounces a week in weight. *Case III.*—Mr. ——, aged 32. Cough for five years, almost incessant when treatment began; profuse night sweats; very weak; evening temperature 104°. Returned to manual labor after four injections, thinking himself cured. But he discontinued treatment, and is growing worse. Will return to treatment. *Case IV.*—Miss ——, aged 32. Chronic asthma. Two enemata cured her of present attack, and has not had return. The other cases are alike. The Doctor uses potassium sulphuret, gr. xxxvj, dissolved in a quart of water. Through this, a stream of carbonic acid gas is passed (produced by the action of the sulphuric acid on bicarbonate of soda) into the bowels—about three quarts of the gas so generated, at each sitting of about

50 minutes, once daily about one or two hours after meals, until improvement begins. Any gas more diluted than the above is not efficient. He has had no unpleasant result yet, except a transient pain produced by distension, which passed off rapidly, leaving the patient cheerful and bright. He thinks an hour after eating is better than waiting two hours, because it aids digestion. He never uses gas over two hours old.

Methods in Electricity.

Dr. F. T. Paine, of Comanche, Texas, says (*Daniel's Tex. Med. Jour.*, June, 1887) that, one change he would make with all electrical instruments now in use is to substitute conducting cords of unequal lengths—one 2 yards long, and the other 3 yards. In treating inflammations and fevers, he places his patient under the influence of positive electricity, and thus reduces temperature. The electrodes of the present batteries are too small. He uses a copper plate 4×8 or 12 inches for the feet, and one 2×4 or 6 for the back, over the spinal column, which is the most insensible part of the body to the Faradic current. But being directly over and near the origin of the spinal nerves, it is the best location for the indifferent and stabile electrode; but, of course, the active or labile electrode can be used whenever necessary. The whole length of the spine is normally insensible to the current; if otherwise, it is abnormal, and electrical treatment will restore the normal insensibility when the spinal cord is restored to a normal state, for the disease is internal—not external. This state obtains in some of the paralyses. A valuable electrode is made by placing a piece of covered metal under a wristlet on the arm, and attaching a cord to the metal, converting the hand into a valuable instrument for diagnosis, and sometimes for the treatment of the head and face, the female genitalia, and always for children. But it is a cautionary remark to state that the Doctor lost some 20 pounds of extra obesity in the six or eight months' incidental use of this electrode.

Infants—Their Chronological Progress.

Dr. Stanford E. Chaillé, of New Orleans, La., gives (*N. O. Med. and Surg. Jour.*, June, 1887) a statistical article on this subject, which is of interest to practitioners, and the details of which we do not believe can be found in any one book. It is an extremely difficult thing to make a perfect synopsis of such a paper, but we believe we have included in the fol-

fowing a note of every important statement or figure. The infants or children selected for study are of the average class —not the exceptional ones:

First Four Weeks of Life.—Cord begins to wither on 1st, dries up by 3d, sloughs off about 7th, and cicatrizes about 10th or 11th day. Exfoliation of epidermis continues usually to 40th day. *Pulse beats* per minute about 140 at birth; 128 at six months; 120 at one year; 110 at two years; 90 to 100 at three years. From birth, the *reflex acts*, sucking, crying, sneezing, hiccoughing, yawning, etc., are merely reflex, with little active volition and little perception of external objects.

The senses are incapable of delicate appreciations. For some days, days, taste, touch and smell are better developed than hearing and sight. But even *taste*, the sense best developed at first, is very inferior to the adult's, and continues so at least to 6th month; babies swallow, without apparent disgust and even with relish, nauseous things, While there is *common sensation*, yet *touch* is so imperfect that it is probably some months before a baby can appreciate the *place* on its body where it may be touched, and still less the nature of *the thing* which may touch it. Sensitiveness to *odors* is seldom shown before the 5th week. Babies are at first apparently deaf, but, during first fortnight, susceptibility to sound is usually observed—sudden sounds causing them to start and blink. They take months to learn to appreciate *direction* and *distance* of sound. During 1st week, babies probably distinguish *light from darkness*, but not until 2d week will their eyes follow a candle. In fact, nothing except a light will cause them to fix their eyes, from usually about the 10th to the 45th day. Physiology justifies the belief that the baby must see two images, both flat and upside-down, of every object look at; months are taken to acquire appreciation of the *solidity* and *distance* of visual objects. *Fear* is not usually manifest before the 3d month. Babies usually first smile after 3 weeks of age. At 15 days old, probably earlier, a feather, passed over the eyes and nose, may cause the eyes to close, nasal contraction, and a frown Dr. Chaillé has trustworthy evidence of one baby, who shed its *first tear* before it was 14 days old, and he has under observation a baby who shed its first tear, out of one eye only, on 8th day; yet this infant never lacked the ususl accomplishment of crying. Lachrymal glands usually begin to secrete during 3d and 4th months; the salivary glands during 5th and 6th months. These facts justify the inference that the *pancreas* and other conglomerate glands gain slowly their power to secrete.

One Month (30 *to* 60 *days*) *Old.*—Before 40th day, the hands move awkwardly, but voluntarily, to the mouth, but other movements continue to be vague, jerky, purposeless. At 30 to 40 days, *luminous objects* give pleasure. About 5th week, repugnance to some bad *smells* may be shown, and at 6 to 8 weeks some odors attract, while others repel. About 5th week, *mouth and tongue* begin to move in crying, instead of this being exclusively laryngeal as heretofore. The first expression of *disgust* has been noted at the 7th week.

Two Months Old.—Begin to acquire *idea of distance;* they less frequently scratch their faces without intending it. At 11 weeks a baby may take a bottle in the right hand, and a week later in the left. At 2 months no appreciation may be shown of ordinary sounds, such as a footstep in the room; and no color be noticed except red. *Anger* may be shown, and there may be a frown, due to mental displeasure. At 2½ months old, a bottle of water, instead of milk, may be refused with an expression of disgust. A genuine laugh is not apt to be observed before the 65th day.

Three Months' Old.—Head can usually be held erect when 3 to 3½ months old. About end of 3d month, the distinct color of the skin, whether blonde or brunette, is usually established. Tears are usually shed 3d or 4th month. The hands are voluntarily lifted to the face much oftener; they are stretched out also to near objects, and the arms are held out to the mother. At 3d month, the infant begins to employ *touch*, to take hold of and feel everything. *Sounds*, if rythmical, are apt to give pleasure. At 3 to 5 months old, babies are fond of *brilliant colors* only, and may be amused with some pictures. From 3d to 10th month, *fear* is plainly shown, and is aroused far more through the ear than the eye. When 3 months old, there may be *dreaming*, also *jealousy*, and *anger*, indicated by pushing away things disliked. When 3½ months old, a baby may be amused by covering and uncovering the face. At this age, though usually not until 6 or 7 months old, there may be joyous babblings, but only vowel sounds; and he may distinguish several parts of the body; for instance, if asked, "Where are your feet?" the baby may look at them.

Four Months Old.—Can sit upright and execute a few actions with hands, although he still often fails to seize objects. Use of hands and arms is developed much sooner than use of feet and legs. At 4 to 6 months old, all babies like to be sung or played to, and some even when 1 month old. They do not readily direct their eyes to the source of

a sound. They look intently at their own hands or other objects close to them, and are then apt to squint. Fear, *the first emotion manifested*, is plain when 4½ months old; also violent anger, with rush of blood to face and scalp. Darwin observed a very distinct sob on 138th day. At 4½ months old (102d day, in one case), may smile at an image in a mirror, but not likely before 5th month to appreciate that what is seen is only an image. Infants enjoy looking at their own image. Though not usual, there may be evidence that a voice is recognized, and such sounds may be made as ap, pa, mam, ma.

Five Months Old.—Saliva begins to flow on 6th month, as preliminary to dentition. He has seen it flow freely at the close of 2d month, without apparent connection with dentition. A baby may attempt to move in time with music when 5 months old, and may associate his own name with himself, and his eye may seek his nurse if her name be called. Further evidence of the dawn of ideas and associated ideas may be manifested by anger, if not taken out of doors as soon as its cloak and hat have been put on.

Six Months Old.—Sits up; arms, hands and fingers accomplish many delicate movements, and playthings are enjoyed. May be induced to swallow disagreeable things, merely by changing the color. Lively music gives more pleasure than grave, sweet music; however, musical education can rarely be begun before the 5th or 6th year. The drum, then the trumpet, are the first instruments of primitive man, and the favorites of children. There may be painful dreams, and also efforts to imitate. There is some comprehension of the meaning and feelings of others by their facial expression—when, for instance, the mother cries, or pretends to do so. Babies respond with evidences of gratification to attempts to amuse them; will stroke the mother's face and babble inarticulate sounds of admiration. They begin to make a series of sounds with the vowel a (long, not short), ai, au, etc. In first efforts at speaking, there is always marked preference for a and other vowels.

Seven Months Old.—*Teething* generally begins at end of 5th or beginning of 7th month, and terminates about 24th month. If no teeth by 10th or 12th month, the cause is usually found in defective nutrition and sanitation.

The twenty teeth of infancy are usually cut in the following order—viz: Two central incisors of lower jaw when 4 to 8 months old; two central incisors of upper jaw when 8 to 10; two lateral incisors of upper jaw when 8 to 10; two

first molars of upper jaw when 12 to 15; two lateral incisors of lower jaw when 12 to 15; two first molars of lower jaw when 12 to 15; four canine or eye-teeth when 16 to 20; four last molars when 20 to 30 months old.

After 6th month, babies sleep chiefly at night. Usually at 7th and 8th month, they begin to crawl. May be able to shake its head when told to do so; but even at 7¼ months old, it is usually unable to follow with the eyes an object swinging rapidly. At this age the nurse is usually associated with her name. If not at 6th month, then by 7th month, begin to mumble, m, m, m, and p, p, p, which soon become mamma and papa.

Eight Months Old.—Usually begins to imitate sounds, and articulate several syllables. Speech is first always of monosyllables, and of these reduplicated; dyssyllables come slowly, about 20th month, and polysyllables still more slowly.

Nine Months Old.—Begin to rise on feet, clinging to some object, and learn to walk. Associate their own names with their image in a mirror, and begin to look behind to discover cause of shadow.

Ten Months Old.—A vivid appreciation of odors is manifested from the 10th to the 15th month. May be taught that it is naughty to cry in order to get what is wanted; and also taught, even earlier than 10th month, to make itself underderstood about messing in its cradle, and afraid to do so. Usually only two or three words can be spoken.

Eleven Months (335–365 *days*) *Old.*—Anterior fontanelle should not be as large as a dime; by 20th to 24th month, it ought to be imperceptible; however, complete ossification, which may occur from the 14th month to 3½ years, usually occurs during the 2d year. At 11 months, violent passion may be shown, as by pushing away and beating playthings. Many actions may be imitated, and may be taught to be afraid of fire. Gestures, intonations of voice, numerous words and short phrases may be understood, although only a few syllables can be spoken; many animals, unable to speak a word, can yet be taught to understand many words. May attempt before 1 year old to accompany its nurse in singing.

One Year Old.—Most notable progress, during the first year, is the development of the senses and voluntary motion; and, during the second 12 months, in walking and speaking. The dawning of speech is the first decisive indication of development from a lower to a higher animal. Although infants still prefer, at this age, the role of quadruped, yet most

of them toddle a few steps by themselves, and before the second year begin to run alone. When a year old, a child is readily deceived about the distance of a sound. Seldom manifest spontaneous affection, as by voluntary kissing, until after one year; but anger with revenge is shown; the anger is often justifiable, yet is not infrequently due to caprice, jealousy, hatred. From 12 to 15 months, children usually manifest that they are heirs of traits which characterize primitive man—viz., self-consciousness, egotism, credulity, impulsiveness, erascibility, jealousy, cruelty, obstinacy, cunning, and dissimulation. No one ought to be astonished if children, at this age, steal and lie; for instance, steal sugar and deceive about it. Nature's first law is self-preservation, and lying and stealing must *seem* to the child, much oftener and more urgently than to the adult, indispensable to self-preservation. It will do good to prove to him that, although lying may *seem* needful, yet his self-preservation depends really on his truthfulness. This lesson, if enforced, even with switch, will not tend to postpone the development of the moral sense. The first evidences of dramatic art, strongly pronounced in most children, and also of moral sense, is said to have been observed as early as the 13th month. When one year old, infants may imitate the voices of dogs, cats, pigs, donkeys, etc., and may put two words together; do not articulate distinctly until 2 years old.

Fifteen Months Old.—Great progress has been made in motor activity; hand is trained to touch with discrimination; a spoon or glass can be carried to the mouth. The eye and ear can appreciate distance. Frowns and angry voice may be imitated when only 15 months old, and be transmitted thus early from sire to son. Jealousy becomes plainly manifest. Child may be rendered very unhappy by disapproval —as when its mother says, "I am angry." At 16 months, pity, or capacity to feel another's woe, may be manifested. The child, heretofore exclusively egotistic, may thus evince the budding of altruism. After 15 months old, children begin to *compare*, seeking much more for resemblances than for differences; and will drolly counterfeit the voices, cries and songs of animals familiar to them.

Eighteen Months to Two Years Old.—A spade, mud and sand are highly valued. While such proclivities should not be injudiciously interfered with, propensities demand imperatively judicious interference. Children slowly acquire appreciation of solidity, distance, dimensions, and movement of objects. A strong tendency is shown to imitate adults, and to ask ques-

tions. The difference between *one*, *two* and *several* is appreciated; at 2½ years old, a child may count to 12, but ordinarily, even at 3 years, they cannot count and appreciate more than 4 or 5; and it takes them from the 6th to the 7th year to get up to 100. There are adult savages, Australians and others, who never can count over 4. At this age a child will usually imitate any word proposed to it with some correctness, but certain letters are apt to be pronounced imperfectly, especially short a (as in hat); the dental aspirates, s and z; and the palatals, d, g, k, l, n, q, r, and t. A characteristic of baby articulation is great trouble in pronouncing the difficult letter r, which is learned very slowly. At first l is substituted for r, and then either one for the other.

Two to Three Years Old.—Apt to become sensitive to ridicule, although their sense of the ridiculous is weak under 3 years of age. One case is recorded of an adult, who, on seeing an object, remembered vaguely that he had seen it before, and there was good evidence that this had occurred only once, and when he was 18 months old. However, the general evidence is that there is no memory of anything occurring during the first two years of life. Children up to 2 years of age do not attach meaning to abstract words—such as goodness, wickedness, ugliness; and their reasoning power, from 2 to 3 years old, does not apparently surpass that of adult lower animals, such as the dog. From 2 to 4 years of age, children are transparent egotists, very self-conscious, and almost destitute of moral sense. They appreciate as bad only what is forbidden and punished, and as good what is praised and rewarded. Their parents are their moral law. Even at 5 years of age, their standard of morality is not high, and liable to frequent, serious relapses. However, they begin to have pride, and to be capable of being shamed. But even when 2 years old, a child may show some self-retrospection, some self-distrust, and the germ of a wounded conscience—as indicated by such remarks as, "I would like to be always good; why can't I?" and "I feel that I cannot be good." At 2 to 3 years of age, children, not infrequently, iterate and reiterate the same words without any meaning, and as if imbecile, although not so.

Three Years Old.—Can understand the idea, not only of yesterday, but also of the day before yesterday. The odious tendency to mockery, for instance, of the infirmities of others rarely shows itself until after the age of 3 years, unless earlier developed by reprehensible example. Darwin's child, when 3 years and 23 days old, had good memory of what occurred 6 months before.

At 3, the tendencies still begin and end with self. They are prone to cruelty, delighting, as much as savages, in such jollifications as the conjunction of a tin-pan and a dog's tail. They have little notion of justice to others than themselves; are apt to invent very plausible explanations to account for their own evil deeds, and very improbable explanations for the offensive actions of others to them.

The views above maintained are not in harmony with the popular traditional belief, which assigns to children, in higher degree than to adults, such great virtues as faith, innocence and truthfulness.

Darwin teaches that *hair* is first developed during the fifth month of fœtal life; it then grows on the eyebrows and face, and around the mouth as a moustache; at first this fine hair, or lanugo, is longer on the face than on the head; during the sixth month of intra-uterine life the hair thickly covers, with exceptions of the palms and soles, the whole surface of the body, even the forehead and ears. The forehead, even of the new-born infant, is covered with short, fine hair, generally blonde, fine, scanty, and less than a half inch long. The *eyes* of the new-born are always, it is alleged, a dark blue. The eyes generally begin to change color from the sixth to the eighth week. Dalton teaches that "the color of eyes and hair is liable to change during childhood and youth;" that of the eyes is more persistent than of the hair. Hair darkens considerably as it grows older, even up to the time when it begins to turn gray. Topinard says it is common for the hair, and in less degree for the eyes, to become darker during the second period of childhood (7 to 14 years), or later. The eyes and hair darken less in females than in males; the hair of females has less tendency to turn gray; more girls have red hair than boys; dark hair tends to turn gray earlier than hair of other colors. Far more men than women are bald.

About 70 per cent. of dark blue eyes of new-born, will continue at six months, to be "light," that is, some shade of blue or grey, and will continue to be "light" also at maturity. The blue eyes of some 15 per cent. of new-borns will become "dark" by sixth month, and so continue. The blue eyes of the remaining 15 per cent. of new-borns become, by sixth month, neutral or "mixed," that is, brownish or green; one-third of these "mixed" eyes become "dark" by fifth year, another third "dark" at maturity, so at this last period of life, "dark" eyes will have been increased, at expense of mixed eyes, from some 15 to about 25 per cent. Golden

red hair strongly tends to become dark to greater degree than does auburn red hair. For several months hair may not be even one inch long, but when it once begins to grow well it may grow even an inch a month.

Growth furnishes much the best evidence of healthy progress. *Weight* is the most trustworthy factor; next is *height*, and next is *chest-girth*. During first three days there is always loss of weight, which should be regained by seventh day. During the next three weeks there should be a gain of from two to four ounces every week. The greatest gain throughout life is during the first five months, the maximum being usually attained during the second month—from four to seven ounces weekly; during three succeeding months about five ounces weekly. During remaining seven months of first year, gain should be at least two to four ounces weekly. The gain is less than indicated at times when the nfant may suffer, whether from teething or other cause.

New-born baby's weight; average 7 pounds; ordinary range, 5 to 8 pounds; extremes, 3½ to 12 pounds. Average height, 19½ inches; extremes, 16 to 22 inches.

WEIGHT.	AGE.	HEIGHT.	CHEST-GIRTH.
7½ lbs at	1 month	20.5 inches	13.2 inches
9½ "	2 "	21. "	
11 "	3 "	22. "	15 "
12½ "	4 "	23. "	
14 "	5 "	23.5 "	
15 "	6 "	24. "	16 "
16 "	7 "	24.5 "	
17 "	8 "	25. "	
18 "	9 "	25.5 "	
19 "	10 "	26. "	
20 "	11 "	26.5 "	
21–24 "	1 year	27. "	17.2 "
28 "	2 years	32. "	
32 "	3 "	35.5 "	
36 "	4 "	38.5 "	
40–50 "	5 "	40–41 "	21.3 "
60–67 "	10 "	50–53 "	25. "
100–110 "	15 "	61–64 "	30. "
110–150 "	20 "	62–67.5 in.	35. "

While from birth to full growth the body elongates three to four times, the *head* only doubles its length. The greatest growth is during the first two years, and by the seventh year its growth is so nearly completed, that Dr. Hammond asserts that the hat which fits a boy seven years old, will fit him when a man. Quetelet's table on the subject does not fully confirm this assertion.

Alimentation in Continued Fevers.

Dr. Francis Duffy, of Newberne, secured the honor of presenting the "prize essay" before the recent session of the Medical Society of the State of North Carolina (*N. C. Med. Jour.*, June, 1887). He said that the "starvation treatment" of fever of years ago was based upon the idea that to feed in fevers was to add fuel to the flames. Gradually the disposition to feed and not starve increased until it is now common practice. If the healthy body secures normal nutrition from proper food, it does not follow that the destructive tendencies of fever call for increase of nutritive material. If gastric digestion is impaired, albuminoid substances artificially converted into peptones cannot always be absorbed, or if absorbed cannot be properly assimilated, as the blood is overburdened with the waste products of the body as well as excess of alimentary principles. Fothergill holds that the liver during fever cannot convert proteid matters into serum-albumen for tissue-repair; nor can it control the change of the poisonous products of the blood natural to the healthy condition, when it is already burdened with the poison present on account of fever. Ptomaines were first discovered in the cadaver, but they have since been found in life, the exact conditions of their production being unknown, except as a result of putrefactive decay. Certain foods may produce a substance containing these bodies, but food not taken into the alimentary canal does not show them. Brieger believes that they are the result of the action of pathogenic bacteria. Gautier recognized their frequent presence in the animal organism, but their poisonous properties were overcome by elimination or their destruction by exudation. These two processes are less effectual if the blood is already charged with the digested products which diseased tissues cannot assimilate. Dr. Duffy then recalled the common experience of practitioners that large quantities of milk or other liquid food may produce nausea, vomiting or diarrhœa, showing indigestion. He objects to the indiscriminate use of milk in fever, and thinks Dr. Loomis has made a mistake in advising large quantities—six quarts—to be taken in the 24 hours. The stomach of the typhoid fever patient cannot properly digest more than three quarts in that length of time. Flint advises from one to two quarts; but Riechman found it took two hours to properly digest a half pint. Meat or beef teas have little value—their chief worth being slightly stimulating. Gelatin belongs to the same class. Fothergill claims that carbo-hydrates with al-

buminoids are of value. Grape sugar or glucose is easy of assimilation, and should be supplied freely. Do not introduce into fever diet much starchy food. In a case of typhoid fever under his care, for the first few days all food was disgusting; then for several days meat juice was tolerated. Tea with milk and sugar, iced water and carbonated waters allayed thirst. Milk and gruel in small quantities were taken, but butter-milk and clabber seemed to be better digested. Chicken water, containing starchy substances and alcoholics, were sparingly used. Butter-milk and clabber have theoretic advantages over unchurned milk, in furnishing less fat, and being acid, the latter making them more agreeable to the thirsty patient. These two articles being acidulated with lactic acid, have in them a carbo-hydrate capable of rendering palatable extracts of malt, honey or cane sugar. When for many days there was no desire for food, the articles referred to were taken in small quantities at short intervals. But, although there was no gastric or intestinal disturbance, the loss in weight averaged a pound per diem for three weeks. He believed with Fothergill that the carbo-hydrates can be given in cases of fever to great advantage, and mentioned having used the juice of the ripe Scuppernong and of the Malaga grapes with apparent advantage. It is not the fever which is to be fed, but the patient, and his specific wants must enter into the rules for feeding him. He has seen benefit arise from the use of prepared or predigested food in acute pyrexiæ; although the danger of excess of milk peptones and of beef peptonoids is real. If the patient without power of digestion has a conservative loss of appetite, has not also the patient without power of assimilation a conservative loss of digestion? Therapeutic indications derived from science and nature should be in harmony.

Early Epidemics in New Orleans.

Dr. J. P. Davidson, of New Orleans, La., narrates "some personal reminiscences" (*New Orleans Med. and Surg. Jour.*, June, 1887) dating as far back as 1828, when he entered the U. S. Marine Hospital. The *yellow-fever epidemic* of that year was rather of an inflammatory form. The treatment was castor-oil with ℈j calomel. Patient was carefully covered with blankets; ammonia carbonate, gr. v, was given in emulsion every two hours, until free sweating set in, which was promoted by warm drinks with nitre. Cold to head and wet cups to back of neck when cephalalgia was severe.

Nausea, etc., checked with cups to epigastrium. Saline cathartics and enemata. Hæmorrhages were often profuse. Rarely did black vomit occur very early, and death was general result. Creosote, tincture of iron, kino, powdered charcoal and acetate of lead were used to check hæmorrhages. The ammonia treatment in the early febrile stage often caused gastric irritability. Topical bleeding was common to relieve headaches, nausea, etc. No drastic beyond the first dose of calomel was given. Anthrax and buboes in the groin were common in convalescents. The two extremes of practice prevailed—(1) antiphlogistic and evacuant, and (2) the expectant plan. Very mild forms were treated by mild laxatives and diaphoretics, spongings, etc., and a doctor was not usually employed in such cases.

The epidemic of 1829 was of the sthenic and inflammatory type; the fever was intense from the very beginning, which was sometimes ushered in with a convulsion, and active delirium followed the initiatory chill. Blood-letting was well borne, and cupping and leeching followed whenever the reaction ran high. "Rush's powder" (calomel and jalap ā ā ℈ j) was thought to be powerfully antiphlogistic, and was given in violent forms of the disease for the "constitutional effects." Calomel was followed by magnesia sulphate or the "black draught" (compound infusion of senna). Applications of ice, cold affusions, etc., were used to lower the temperature.

Dr. Merrill, a celebrated physician of his day, was the only successful practitioner with yellow-fever at the Bay of St. Louis, Miss., in 1820. Out of 700 soldiers, he lost only seven. Every patient was bled to faintness, then violently purged with castor-oil, or purgative pills, or calomel, ℈ j. Afterwards, the bowels were kept open. Every febrile exacerbation was met by a cold shower bath of sea-water, continued as long as the patient could bear it, who was immediately afterwards placed between blankets and briskly rubbed, and allowed hot tisans freely. In 1822, he tried the same treatment in Pensacola, and did well among the soldiers, but was not so successful in private practice, for the treatment could not be enforced with private patient. The grave diggers in West Florida, who lived in the cemetery and drank whiskey freely, alone were exempted from attacks of the fever.

The epidemic of 1830 was of a malignant and fatal type, assuming the asthenic or adynamic character. Broussais' gastro-intestinal inflammatory theory then prevailed, and

treatment was accordingly adopted. But the mortality in the ward's set apart for the trial of the therapeutic views of Broussais was so fearful, that after a few days the experiments were abandoned. The epidemic was asthenic. Black vomit began on second or third day. Hæmorrhages occurred from gums, nose, eyelids, bowels, and exuded even from petechiæ. Labarraque's chloride of sodium, creosote, powdered charcoal, champagne and weak mint juleps were used to relieve the black vomit. Iron, kino, catechu, charcoal and sugar of lead were used to check hæmorrhages; and alcoholic stimulants and nutrition were given. The tendency to disorganization was so great that sloughing of the scrotum, buboes and carbuncles were common. The epidemic of 1832 was not so malignant.

Cholera appeared first on this continent at Quebec, Canada, in October, 1832, and reached New Orleans the same month. Yellow-fellow patients attacked with cholera, invariably died. But the career of the fever epidemic was cut short by the severer epidemic of cholera.

Prior to 1841, quinine was only given in moderate doses in *yellow-fever*, and often acted beneficially as a tonic. In 1841, it was given in doses of 20 to 25 grains, alone or combined with opium, or with a decided dose of mercury. It may have shortened the primary febrile stage, but did not cure the disease.

In the epidemic of 1847, which was comparatively mild, quinine gave better results—due, however, to the milder form of the epidemic.

In the very severe epidemic of 1853, quinine was used as antipyretic in doses of ℈j to ʒss, either alone or combined with ℈j doses of calomel. But the treatment was unsatisfactory, proving the inutility of quinine—it even aggravating the gastric irritability and increasing nervous disturbances.

Previous to this epidemic, unacclimated persons removed a few miles out of the city, visiting the city only after sunrise, and leaving before sunset, and they escaped the fever. But this epidemic of 1853 reached plantations and isolated places. Prior to 1855, the African race were comparatively exempt from yellow-fever; but in 1855 and 1858, it attacked whites and blacks indiscriminately in many localities. The fever of those years frequently skipped over one plantation to settle on another.

Contrasting the epidemics prior to 1840 with those afterwards, the universal hæmorrhagic tendency has been less

since 1840, as also the tendency to profound disorganization of the blood and tissues. The disease being short-lived, and having a definite course to run, the treatment must be mainly symptomatic.

Eleven Cases of Thoracic Aspiration for Pleuritic Effusion—Eight Pints of Purulent Fluid Withdrawn in One Case.

Dr. F. Peyre Porcher, of Charleston, S. C., whose study of cases in practice has made him authority, and whose able contributions to medical literature have helped very materially to direct medical thought and to advance medical sciences, comes out now with a "Third Series" of reports of cases of aspiration of the chest for pleuritic effusions (*New Orleans Med. and Surg. Journal*, June, 1887), making the total number of cases so far reported 43, with one of aspiration of a vomica in the lung, and two of the pericardial sac. Fitch's "dome-trocar," because of its greater safety, was invariably used as the aspiration needle in operations on the pleural cavity. Most of his cases were right pleurisies. He quotes at length Prof. Jaccoud, on "the indications for thoracentesis in acute pleuritis."

Peri-Uterine Hæmatocele.

Dr. Wm. S. Gordon, of Richmond, Va., reports with interest (*N. O. Med. and Surg. Jour.*, June, 1887), a case of peri-uterine hæmatocele which occurred in the practice of Dr. John G. Skelton, of Richmond, Va. Negro, æt 18, began to menstruate when 16, and was regular except slight dysmenorrhœa during the first two days of each period. February 26th, while walking, suddenly a "falling" in of her abdomen, attended with faintness and nausea. Pain prevented free movement; constipation and dysuria. On 28th, she walked out and had sudden increase of pressure pain and distension; then there was marked fulness of abdomen. Pain, severest at night, extended down right hip. Applied fomentations, and gave nitre. About March 4th, menses returned. March 6th, tumor (extra peritoneal) extended from pubes to an inch below level of navel, and from right ilium to an inch beyond median line. The effusion of blood was probably ℥x. The tumor, which was soft at first, was now tense, smooth and sensitive. Left ovarian region also sensitive. Prescribed rest in bed, simple nutritious diet, nitre, morphia, gr. ¼th to procure ease and sleep. No external applications. March 12, not much swelling on vaginal examination; fundus uteri pressed to left;

os to right. Next day, micturition easier; tumor slightly diminished. On 15th, tumor still diminishing, and urination almost natural; pain in leg gone. On 17th, patient felt decided lessening of swelling, and got out of bed. Afterwards, she steadily improved, and soon returned to her daily duties. April 6th, no tumor was noticeable through clothing. Note the simplicity of treatment and the good result.

Typhlitis.

Dr. J. T. Hamblet, of Abbeville, La., reports (*N. O. Med. and Surg. Jour.*, June 1887), the case of a female, æt 7 years, of previous good health, who first complained of pain in right knee and hip, extending over right iliac region; leg semi-flexed; slight fever; appetite depraved; anæmic. Diagnosis, typhlitis. Dr. W. D. White, of Abbeville, also saw the patient. Prescribed Reed & Carnrick's peptonized cod liver oil and milk, etc., with anodynes. This treatment preserved the strength of the patient for three weeks, when Dr. White decided on laparotomy. An aspirating needle was used for exploration. Introduced just above crest of ilium, it brought no pus. Next day, exploration a little back of the first brought out about half teaspoonful of serous looking pus. Aspiration still further toward the vertebra, pointing backwards and downwards, brought away about half ounce of pus. Sickness prevented the doctors from seeing the patient for four or five days. Then the swelling was subsiding, tenderness less, spirits better, and gradual improvement progressed for a month, when recovery was perfect, *without laparotomy*. Was the cure the result of absorption induced by the frequent exploratory punctures?

Gunshot Wound of Arm—Practical Thoughts on Treatment of Wounds.

Dr. R. H. Day, Baton Rouge, La., (*N. O. Med. and Surg. Jour.*, June, 1887), was called to a youth, aged 16½ years, who had been shot an hour previously in the right arm with a whole load of shot and wadding. It impinged on the inferior outer half of the ulnar portion, shattering the ulna into fragments, stripping the periosteum, cutting away the upper and outer half of the annular ligament, and emerged about 2½ inches below the bend of the elbow. The soft parts were a mass of lacerated, blackened tissue, involving nerves, bloodvessels, etc. Dr. Buffington, in consultation, agreed in trying to save the arm. Spiculæ were carefully removed; loose portions of the ulna were taken out, and

fragments were cut off with bone forceps until uninjured periosteum was reached; all devitalised tissue was removed, as also all foreign bodies as far as possible. The wound was then washed with warm carbolized water. Torn arteries were searched for, but could not be found, and there was but little bleeding.

℞. Carbolized oil..... ℥iij
Laudanum..... ℥j
Benzoic acid ..... ℥ij—M.

Wet thick pledgets of absorbent cotton on one surface with this liniment, and apply to wounds. Apply oakum waddings above the absorbent cotton, making a thick elastic compress. Over this compress, applied uniting bandage to limit the circulation in the parts, and to uniformly support the side of the wounds. Placed arm in light fenestrated box and kept this in a sling. On fourth day removed soiled and applied fresh dressings—dusting iodoform over the compress to promote healthy granulations. Redressed every day afterwards, and at the end of six weeks the wounds were nearly healed. Not more than an inch of the carpal end of the ulna and two inches of the upper end remained. At each dressing the wounds were well syringed with the liniment. The Doctor regards Listerism as of secondary importance; but the grand results claimed for it are due to the rigid and scrupulous cleanliness, and the care in details practised in connection with that system.

Medical Ethics

Was the title of the President's Address (Dr. Wm. T. Briggs, of Nashville), delivered before the Tennessee State Medical Society, April 1887, which is published in full in the *Nashville Journal of Medicine and Surgery*, June, 1887. He advocates the preservation of the "Code of Ethics" as it is.

The Annual Message of the President of Medical Society of the State of North Carolina,

By Dr. Henry T. Bahnson, of Salem, N. C., is given in full in the *North Carolina Medical Journal* for June, 1887, and a full synopsis in the May No., 1887, of the *Virginia Medical Monthly*. We return him our thanks for the remark that this journal has been "advanced to the front rank of medical literature."

Book Notices.

A Practical Treatise on Obstetrics. Vol. IV. *Obstetric Operations. The Pathology of the Puerperium.* By A. CHARPENTIER, M. D., Paris. Illustrated with Lithographic Plates and Wood engravings. This is also Vol. IV. of the "*Cyclopedia of Obstetrics and Gynecology*," (12 vols.), Issued Monthly during 1887. Price of the set $16.50. New York: William Wood & Company.

It may be that the Publishers have adopted the wrong policy, as claimed by most practitioners who have written us on the subject, in compelling the purchase of the entire set of the 12 annual volumes in order to get the one book out of the set that is wanted, and thus, to the specialist especially, may make his library extremely expensive. But for the general practitioner we are almost willing to say that the total annual subscription of $16.50 may profitably be given in order to get the library on obstetrics, which is this year being published. Charpentier's *Treatise* alone is almost worth the price. It is standard authority, and is the most complete, practical work on the subject that we know to be serviceable—we were about to say, indispensable—to the practitioner. Not only are the descriptions true to life, the statistics in keeping with daily observation, the theories well supported, and the directions in a given case practical in all their details; but there is a general popular style of presenting these things which impresses the reader, and makes the facts easily remembered. The four volumes of Charpentier's Treatise on Obstetrics *are excellent.*

Hysteria et Traumatisme Paralysies Contractures, Arthralgies, Hystero-traumatiques. Par le DR. PAUL BERBEZ, Ancien Interne en Medicine et en Chirurgie des Höspitaux de Paris, etc. Paris: Bureaux du *Progres Medical.* 1887. Paper. 8vo. Pp. 127. (From Publishers, A. Delahaye et Lecrosnier, Place de l'Ecole-de-Medicine, Paris, France).

As the title indicates, this publication is a contribution to the study of the surgical aspect of hysteria, so far as it manifests itself in the form of paralyses, contractions, neuralgias of joints and hysterical traumatisms. At least one half of the book is taken up with minute records of illustrative cases; and these records will make this book of great value to every student of this recently studied condition of the nervous system. Numerous wood cuts help the descriptions of the text very materially, so far as the appearances of the contractures, parts paralyzed, etc., are concerned. Of course the text is French;

but the style of the author is plain and excellent—with very few of those vexing idioms that ever and anon spring up in French publications, and die out of use by the time the American has learned to translate them.

(I) Therapeutical Drinking of Hot Water. (II) Salisbury Plans of Diet in Chronic Diseases, with Directions for Preparing Beef Pulp. By EPHRAIM CUTTER, M. D., of New York city. New York: W. A. Kellogg. 1886. Cloth. 12mo. Pp. 38–9.

This is practically a monograph, advocating the value of drinking hot water, and the Salisbury beef diet plaus in chronic diseases. The successful results of these measures prove their value. The book is worth careful study, and most of the details described are worth adoption.

Nursing and Care of the Insane. By CHARLES K. MILLS, M. D., Professor of the Diseases of the Mind and Nervous System, Philadelphia Polyclinic, etc. Philadelphia: J. B. Lippincott Company. 1887. Extra Cloth. 12mo. Pp. 147. Price $1. (For sale by West, Johnston & Co., Richmond).

This is the first of a series of four announced publications on "Practical Lessons in Nursing," which we most cordially commend, and wish we could popularize. There is no aphorism nor quotation more generally abused than that which says, "A little learning is a dangerous thing." It may be true if the party who possesses the "little" intends to be a teacher; but that "little" is a very serviceable thing if the owner intends simply to use it to follow out the line of instructions given by an intelligent physician. With this book in hand and properly read and consulted as occasion requires, the physician will soon find that he has an intelligent nurse. An intelligeut nurse stimulates the doctor to study, and thus progress is made in science and patients are benefitted. It is a degrading thought to think there are some physicians who do not wish their patrons to kuow auything of medicine. Let us elevate our profession by teaching all we know, and then go to work and learn more ourselves—thus always keeping in advance.

Medical Students' Essentials of Physics and Chemistry. By CONDICT W. CUTLER, M. S., M. D., Physician to New York Dispensary, etc. New York: J. H. Vail & Co. 1887. Cloth. 16mo. Pp. 468.

This compend has several uses. It serves the expert as a hasty or ready reminder of established facts and principles. It serves the student, or the party about to stand examina-

tions, as a review book. To the casual reader, it serves as a little note-book for reference. The book is well arranged as to the order of subjects, and a good index to each part is appended. The volume, as now neatly issued from the press, is the second edition; and the opportunity has been availed of to correct the few typographical and other errors of statement that were detected in the first edition.

Practical Bateriology. By THOS. E. SATTERTHWAITE, M. D. Published by Geo. S. Davis, Detroit, Mich. 12mo. Pp. 85. Paper. Price 25 cents.

This number of "The Physicians' Leisure Library" we would advise all of our readers, who have not more exhaustive monographs on this subject, to purchase. Every practitioner now-a-days is supposed to know something about micro-organisms of all kinds, although he does not feel it essential to become an expert microscopist or bacteriologist. But he wants to know something about the things he is continually reading about in medical journals, and to get a good general idea of the micro-organisms spoken of. This little monograph exactly suits his needs. It covers the field of an excellent, popular, but reliable medical lecture on the subject.

Editorial.

American Medical Association.

We regret being compelled, by want of space, to omit the full notes prepared of the proceedings of the session of the American Medical Association, held in Chicago June 7–10, 1887. We feel the less embarrassed, however, in departing from our usual custom in making full reports of these proceedings, because all of our readers should be subscribers as well to the *Journal of the American Medical Association*, which weekly journal has been improved and enlarged, and has already given the minutes and many of the papers in full. Besides, the *Chicago Medical Journal and Examiner* and the *Medical Standard*, also of Chicago, issued special *daily editions*, which have been so widely distributed as make it unnecessary waste of space for any other monthly journal to undertake a full report.

The Chicago session was a great success. About 1,100 were in attendance. Dr. E. H. Gregory, of St. Louis, filled the chair well as President. The subject of his address was "Cell-Antagonism." The Trustees of the *Journal of the Ameri-*

can Medical Association made a very encouraging report. That *Journal* has over 4,000 subscribers. Every member of the Association should constitute himself an agent, and induce his neighbors to subscribe. Let us, as an American profession, combine, and make this—our nationally representative medical journal—superior to its only competitor—the *British Medical Journal.* The Association voted $1,000 to the International Medical Congress. The officers for the ensuing term are: *President*, Dr. A. Y. P. Garnett, of Washington, D. C.; *Vice-Presidents*, Drs. Duncan Eve, of Nashville, Tenn.; Darwin Colvin, of ——, N. Y.; Chas. J. O'Hagan, of Greenville, N. C.; and A. Stedman. of Denver, Col.; *Secretary*, Dr. Wm. B. Atkinson, of Philadelphia; *Treasurer*, Dr. Richard J. Dunglison, of Philadelphia. The next annual session is to be in Cincinnati, Ohio, beginning the second Tuesday in May, 1888. The following were appointed to read addresses at the next session: Dr. R. Beverly Cole, of San Francisco, on General Medicine; Dr. E. M. Moore, of Rochester, N. Y., on Surgery; Dr. James L. Cabell, of University of Virginia, on Public Medicine. Hereafter the evening of the third day is to be reserved "for a regular annaul dinner." Each member upon registration, if he desires it, is to fill out an order for dinner, *with or without wines* as he prefers. The Committee of Arrangements is to provide for the said dinner according to the orders received for it at specified sums—leaving no part of the cost of said dinner to be paid either by the local profession or by the Treasurer of the Association.

A Successor Desired.

A physician, wishing to retire because of ill-health, and possessing a competence, will relinquish a very large and lucrative practice to the "right man" purchasing his property at its value. This property has been the home and offiee of well-known surgeons and physicians for nearly fifty years. The present owner having occupied it for more than twenty years, has controlled a large and lucrative practice. This is a rare opportunity to acquire an established business of the best quality, and a home in a beautiful village in Western Maryland. *Terms easy to the proper person.* Address SURGEON AND PHYSICIAN, care of *Virginia Medical Monthly*, Richmond, Va.

Battey's Operation,

As a distinctive operation, and having prior claim to re-

cognition for the purpose of bringing about the menopause, and thus of curing the almost numberless ailments that are known to pass away with the natural development of the menopause, has an excellent advocate in the June editorial of the *Mississippi Valley Medical Monthly*. It is ridiculous nonsense and presumptuous arrogance for Mr. Tait to attempt to rob Battey of this great surgical discovery.

Obstetrical Experience.

During the three months' Reading and Recitation Term of the Long Island Hospital, just closed, the students had the advantages of the new Maternity Wards of the Hospital, and attended 2 abortions and 17 confinements. They witnessed the following complications and operations: Complete inversion of uterus and its reduction, 1; Placenta prævia, 2; Transverse presentations, 3: Twins, 1; Hydrorrhœa (post partum), 1; Forceps deliveries, 2; Breech deliveries, 2; Version, External, 2; and Internal, 1; Restoration of perineum, 3; and Curetting after abortion, 2.

The North Carolina Medical Examining Board

Is fully alive to the importance of its responsible trust in protecting the citizens of its State from incompetent practitioners of medicine. The following is the result of the annual examination in May of those who applied for certificates of qualification:

Graduates of	No. Applicants.	Passed.	Not Passed.
University of Maryland	10	9	1
Col. Phys. & Surg., Balt	6	4	2
Baltimore Med. College	1	...	1
University City New York	7	7	...
Bellevue Med. College	3	2	1
Long Island Col. Hosp	1	1	...
Jefferson Med. College	6	6	...
Louisville Med. College	2	1	1
Vanderbilt University	3	1	2
Atlanta Med. College	2	2	...
Attended No College	1	1	...
Undergraduates	6	...	6
Totals	48	34	14

The Alamance Co. [N. C.] Medical Society

Was recently organized, with Drs. J. B. Gunter, President, and R. A. Furman, Secretary. Dr. Geo. W. Long, of Graham, was chosen as Superintendent of Health.

The Bertie Co. [N. C.] Medical Society

Recently organized with Dr. E. W. Pugh, of Windsor, in

the chair *pro tem.*, by electing Dr. Chas. Smallwood, of Lewiston—the oldest practitioner in the county—President, and Dr. W. S. Gurley, of Windsor, Secretary. The meetings are to be at 11 A. M. on the first Mondays of January, May and September. There is risk of future violation of the "Code of Ethics" if they continue to furnish reports of their meetings to the *Windsor Public Ledger*. The *North Carolina Medical Journal* is a "good enough" journal.

Louisville Medical Society.

At the annual meeting, May 19th, Dr. John Godfrey was elected President, and Dr. T. S. Bullock, Secretary and Treasurer. The annual banquet was an enjoyable affair on May 26th.

Medico-Chirurgical Society (of Louisville).

At the annual meeting, May 20th, Dr. John G. Cecil wss elected President, and Dr. D. T. Smith, Secretary and Treasurer.

The Kentucky State Medical Society

Held its annual session at Paducah, beginning June 15th. The titles of nearly *fifty* papers were announced.

The Kentucky Sanitary Conference

Held in Louisville, May 24–25, under the auspices of the State Board of Health, was well patronized by the number and value of papers; but in point of attendance and public interest aroused, "was a flat failure," according to the *Southwestern Medical Gazette*.

Western Pennsylvania Medical College.

We congratulate this new College at Pittsburgh, Pa., upon the almost phenominal success of its first year, which was concluded with a banquet, provided by the Faculty, to the graduates, March 24th, 1887. The corps of Professors number 22, with an equal number of adjunct teachers and assistants. Oddly enough the number of graduates was 22. Sixty students were enrolled, and a large proportion of the under graduates have entered the junior class for the *three years graded course*. The remarkable success of the first year assures the future solidity and prosperity of the College. The trustees have erected a substantial and complete college building, immediately adjoining the Western Pennsylvania Hospital—one of the first importance among the large general hospitals of the United States. The spring session, just ended, was attended by ten students. For special information, please refer to the advertisement on page 7, in front of reading matter.

Florida Medical Association.

The thirteenth annual meeting was held in St. Augustine May 17–19, Dr. J. Y. Porter, of Key West, in the chair. A legislative bill was presented to the Legislature "to establish a State Board of Health" to have the powers of a State Medical Examining Board as well. Dr. T. M. Hicks, of Orlando, was elected President for the ensuing term, and Dr. A. W. Knight, of Jacksonville, Secretary. Gainesville was chosen as the place for next annual meeting.

Messrs. Purcell, Ladd & Co.

Have removed their house to the commodious building No. 5 Governor street, Richmond, Va., where they have better accommodations than they have had to meet their immense trade with physicians, etc.

Typographical.

In Dr. Meeks' article, June No., page 202, first line, for "authenticated cures," read authenticated *cases.*

Obituary Record.

Dr. Philip James Winn

Died at his home, near Fork Union, Fluvanna county, Va., June 19th, 1887, in his 67th year. He was a graduate of the Medical Department of the University of Virginia in 1843, and immediately afterwards began the practice of medicine, and developed a practice that is said by his biographer to have covered the population of an area of 150 square miles. He always maintained a sacred regard for the trusts confided to him—whether of a personal or public character, for he was several times chosen to fill county trusts. His great popularity as a Christian gentleman and physician is attested by the immense crowd—estimated at not less than 1,500—which attended his funeral at his country home. He was the father of the gifted editor of *Practice*, who has the heartfelt sympathies of the profession of this community.

Dr. R. Fowler, of Eudora, Miss.,

Died at his home from a stroke of paralysis on June 20th, 1887, at the age of 50 years He was a practising physician for thirty-one years. Until about 1880, he resided in different places in Texas.

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ART. I.—To What Extent Can We Classify Vesical Calculi for Operation? Reports of Cases and Remarks on the Different Methods Employed.*

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Mr. President and Gentlemen—Perhaps it may not be out of place for me to give a few of the reasons I had in my mind for presenting this paper.

I do not come from a stone-bearing section, but from a number of conversations held with my associate surgeons and friends in the profession, in my immediate neighborhood, I seem to have had rather more than the average number of cases, and the subject is one to which I have given much thought. There is no operation that affords me so much pleasure to perform as a nice, clean lithotomy; and when I did my first Bigelow operation, I regretted that it was to supplant so much what I had enjoyed in operative surgery. The number of my own cases is not so great that I am come here to speak with authority. They do not present a run of successful recoveries which is so much the laudable

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ambition of our surgical workers at present. In fact, I have much to regret that the mortality is as large as it is, and a firm belief that if I had the work to do over, with my present knowledge, I might do much better. Again, I have reason to believe that my cases have been severe and serious in their make up.

With all the progress we are still making in antiseptic surgery, and many other wonderful advances, I am yet strongly impressed that we must not lose sight of the firm rock *experience;* and with an honest desire that a full and frank discussion of the few points I shall present may result, and that one of the objects for which our Society was organized—the interchange of views and experiences—may be consummated, I will give a short history of the most marked cases, following with a brief report of the different methods employed in this and other countries for the treatment of stone.

I might say that my first case was quite enough to discourage any one from ever getting much comfort in the thought of doing another like operation. In fact, it has been my severest case.

It will be observed that these cases present every variety of stone as to location in the bladder, prostatic, membranous and spongy portions of the urethra, and that the kind, as to formation of hard and soft calculi, is singularly complete, while the extremes of large and small, we find seldom equalled.

CASE I.—**Lithotomy—Lateral Operation—Weight of Stone, 2,850 grains—Death 10th Day.**

Mr. P. C., æt. 69, flagman, correct habits, and health good till the present disease attacked him. Was first seen by Dr. U. G. Bigelow, December 22, 1868. He states that for the past seven years, he has suffered from some disease of the bladder, and during the past three months, confined to his bed most of the time. He complained of severe pains across the pubic region, extending through the fundus and neck of the bladder; also of a dragging sensation in the perineum. The pain in the neck of the bladder was notably severe after micturition. He complained, in addition, of much pain and an itching sensation in the glans penis. The bladder was quite irritable, the desire to urinate being frequent. Mr. C. was also troubled with obstinate constipation. He experienced much difficulty in voiding his urine, especially when in a standing posture—the urine, at such times, being voided in two or three small

streams, or by drops. This difficulty was somewhat avoided by lying on the side, though at times, this expedient was but partially successful. The urine, when examined, was found to contain mucus streaked with blood, alkaline; no casts.

Diagnosis: Stone in the bladder, with chronic cystitis, which a subsequent examination with the sound confirmed.

At this time his health was so poor that Dr. Bigelow did not think an operation was advisable. The plan of treatment was to tone up the system and relieve cystitis. This was so far successful, that on the 3rd of May, 1869, he was removed to the Albany Hospital for an operation. On the 4th, his condition being favorable, ether first, then chloroform was administered by Dr. Bansing; and, assisted by Drs. Armsby, McNaughton and Bigelow, I performed the lateral operation. The bladder was easily entered. The calculus was found in the inferior portion, just below the neck, and partially encysted. It was grasped by the forceps without much difficulty. From the great size of the stone, it became necessary to enlarge the opening into the right and left lobes of the prostate. Considerable force was required in removing it. There was little hæmorrhage following the operation. The patient came out of the anæsthetic nicely, although I had some fears in giving it, there being such a decided atheromatous condition of the arteries. The urine passed out from the wound within a few hours. Patient's condition was all that could be wished for, till the third day, when he had a severe chill; he soon recovered from its depressing effects. On the fifth day he passed his urine for a short time per urethram. During the morning of the seventh day he had another severe chill, and did not rally from its effects as nicely as before. The parts about the wound looked well, except some slight sloughing near the rectum. On the eighth day he was able to take freely of nourishment, quinine and tonics, and seemed quite comfortable.

The calculus measured eight and one-quarter inches in its longest circumference, and six and three-quarters in its shortest. In composition, the nucleus, the size of a large bean, is made up of uric acid, while the remaining portion is almost entirely oxalate of lime; exceedingly hard; capable of receiving a bright polish.

On the afternoon of the ninth day, when having his second passage from the bowels (the first occurred on the fifth day), it was noticed some fecal matter escaped through the incision, showing that sloughing had taken place to quite an extent in and about the wound. The wound was well washed out with warm water, and he expressed himself as feeling much better. While sitting near a window at the desire of his friends, in an easy chair, he was attacked with another chill, and died about 2 A. M., on the morning of the tenth day after the operation. No post mortem was allowed.

CASE II.—**Lithotomy—Weight of Stone, 240 grains—Recovery.**

Mr. S. L., æt. 20, unmarried, good habits, cartman by occupation, born in America. Entered St. Peter's Hospital July 7th,

1874. Father and mother both living; two sisters dead. Dates the beginning of his present trouble back some five or six years. Drs. D. Stimson and E. R. Hun saw him some three years ago, and then detected calculus; was troubled to a slight extent with all the symptoms of stone. I saw him sometime during the early part of this year, when the stone could be easily felt, but did not prevent his working.

On entrance into the hospital, he was enjoying good health, bowels regular, appetite good, slept well, had a desire to micturate quite frequently, with much pain when the urine ceased to flow. Urine not bloody. Urine examined: Spec. grav., 1010; acid; color, pale, smoky yellow. Chemical examination: Clouded slightly by heat; cleared somewhat by adding acid. During patient's stay in hospital, before operation, he was given good diet, rest, flax-seed tea *ad libitum.*

On July 16th, 1874, assisted by the hospital staff, patient taking ether, I performed the lateral operation for the removal of stone, which was accomplished without any difficulty. It was oval in shape, weighing nearly ʒ iv.; long circumference, three and three-quarter inches; short, three inches. On sawing through it, the nucleus and dark lines are found made up of uric acid and various urates; and the white lines, together with the outer coating, of a variety of phosphates, mostly phosphate of lime. The hæmorrhage was slight.

Operation performed at 3.30 P. M. At 7 P. M. patient was feeling comfortable, no pain, and inclined to sleep; at 8 P. M. patient had been sleep an hour; pulse 120, full and quite rapid; temperature, 98¼; a male urinal was placed between his thighs to catch the urine which was escaping freely from the bladder through the tube, and which was left in about three days.

This patient made an easy recovery, and was discharged from the hospital August 22d, cured.

CASE III.—**Lithotomy—Medio-Lateral—Weight of Stone, 102 grains—Recovery.**

Master W. B., Albany, æt. two years and four months, born in America. Date of first attack, August, 1874; entered St. Peter's Hospital May 14th, 1875. Past history: Mother of child noticed painful micturition in patient about August, 1874, which gradually increased in intensity, and was soon followed by all the subjective and objective symptoms of vesical calculus. This condition continued, when in the winter of 1875, he was examined by a surgeon, and the diagnosis of vesical calculus made.

On Saturday, May 15th, 1875, I performed the medio-lateral operation for stone, by aid of the rectangular staff. The angle of the staff was easily reached, and the knife passed into the bladder along the groove with perfect freedom. Urine escaped promptly. The stone was readily seized with small forceps, but a portion of it broke away; after considerable trouble it was removed. The bladder was thoroughly washed out with warm water. There was little

hæmorrhage from the incision; no drainage tube introduced. Patient came out of the ether very nicely, was removed to his bed, and bottles of hot water applied to his extremities, and flax-seed poultice over the region of the bladder. Allowed to drink freely of flax-seed tea. At 5.30 P. M., found patient much excited, and gave morphia sulphate one-twentieth grain, and repeated at 9 P. M. Urine escaping freely through the cut. Female nurse to watch patient through the night and repeat the morphia when necessary. On June 10th he was discharged from the hospital cured. Wound nicely healed, free flow of urine from urethra, unaccompanied by pain. Has gained in flesh. April 26th, 1887, a fine, healthy boy.

CASE IV.—**Rapid Dilatation of Urethra by Heath's Dilator—Fragments Washed Out—Weight, 120 grains—Recovery.**

Mary S., Cohoes, N. Y., æt. 4 years, entered St. Peter's Hospital April 25th, 1875. Father and mother living, also two brothers and one sister, all in good health. About two years ago, her mother noticed that when she went to stool, she cried and complained that "it hurt her to pass water." In the winter of 1873, she got a little better, but in the spring of 1874, she began to get bad again, and continued to grow worse up to the time of her entrance into the hospital.

Patient came at 12 M., April 23d, and was etherized by Dr. Bigelow, who detected the presence of a vesical calculus, and recommended her entrance to the hospital, preparatory to operation. On April 25th, patient was given a mild cathartic, which was followed by a good evacuation from the bowels. On the 26th, at 4 P. M., patient was placed on the operating table, and put under the influence of ether by Dr. Trego. Assisted by the members of the staff, I first dilated the urethra by means of Heath's dilator, sufficiently to introduce Mr. Teevan's lithotrite; then, grasping the stone, proceeded to crush. The crushing of the stone occupied about fifteen or twenty minutes. The bladder was then washed out with warm water, and a large number of pieces of the calculus brought away. The ether was then discontinued, and patient removed to her room and bed. A large flax-seed poultice was applied over the hypogastric region, and flax-seed tea given. 8 P. M., she was quite free from pain, but very much excited. Urine escaped freely on clothes. On May 3d, patient was discharged from hospital, to be brought back again in two weeks for examination.

May 19th. Patient was brought to dispensary, the mother having with her three good sized pieces of the calculus, which the little one had passed while at home. Her health is very much better, and the symptoms of which she complained when entering the hospital nearly disappeared. Did not have time to examine the bladder with sound.

June 25th. The little one was put under the influence of ether, and several pieces of the stone could be detected, which were removed by means of small forceps. From this time the child made

a rapid recovery, all symptoms of vesical irritation entirely disappearing.

CASE V.—Lithotomy—Medio-lateral—Weight of Stone, 480 grains—Recovery.

B. McD., æt. 45 years, married, father of three children; oldest aged 5 years, youngest 5 months. Habits good; a very hard worker; resident of Albany county. Eight years ago last spring, while attending the raising of the frame of a barn, was suddenly attacked with nausea and vomiting, and some pain in right lumbar region; the latter was not very severe. Toward evening of the same day, noticed blood in his urine, which at times was quite free, and continued for three days. From this time on until I saw him, nearly two years ago, has had constantly increasing symptoms of stone in the bladder. June, 1874, I introduced a Thompson steel sound, which gave him great pain; and though permitted to make but a partial examination, I did not detect a stone. In February, 1875, Dr. Morrill again introduced a sound, but with the same result.

December 9th, 1875, I determined on making a more thorough examination; his symptoms of stone being so positive, I felt we must have erred in our former examinations. He was compelled to pass his urine now as often as every quarter or half hour, at times passing some blood; again the stream would stop suddenly, giving him intense pain; little rest at night, and constant pain in glans penis; little, if any, relief had been afforded by the treatment of the past two years. Without very severe pain, I succeeded in introducing a Thompson catheter staff, with a very short curve; and with my finger in the rectum, raising the bladder behind the prostate gland, readily detected what seemed to be a good sized stone. On being told of his trouble, he at once expressed a desire to have an operation performed, and in a week presented himself for operation. The urine was of mahogany color, and gave acid reaction with spec. grav. of 1020. Chemical examination gave considerable albumen, and microscopical examination showed pus, blood, and uric acid crystals in abundance. He was somewhat emaciated, and for the past six months had been indulging quite freely in alcoholic stimulants, to afford relief from his great pain.

On Saturday, December 18th, bowels having been freely moved, I performed the medio-lateral operation. Patient was a long time in coming under the influence of ether, but the operation was of short duration. On introducing the rectangular staff, there was some escape of blood. Following the removal of the stone, quite a quantity of pus and blood escaped, the bladder being somewhat roughened and ulcerated. The stone weighed one ounce; long measurement, 4½ inches, short measurement, 3⅞ inches, and is made up principally of phosphates. There was no bleeding at the time of the operation, but as he reacted from the anæsthetic, the bleeding became somewhat severe, and it was thought best to introduce the

rubber canula, with the compressed sponge about it. This soon controlled all hœmorrhage; stimulants, with carbonate of ammonia, were given quite freely, and by 4 P. M. his condition was as good as could be desired. Urine escaped freely, mixed with some blood, through the canula; anodyne was given at bed-time, and whiskey ʒij ordered every two hours during the night.

Sunday, 19th. Passed a comfortable night; pulse 96, temperature normal; no sickness at the stomach, no bleeding from the cut. Urine flows freely through canula; is relieved of all his old painful symptoms; says he is very comfortable. Stimulants and beef-tea ordered for the day. 6 P. M., has passed a comfortable day; condition about the same as in the morning; has slept some; treatment continued. From this time he made a rapid recovery.

January 10th. Wound entirely healed, and to-day he took a walk out. No unpleasant symptoms. Tenderness of testicles disappearing.

January 12th. Discharged cured. Intending to-morrow to return to his home in the country. Visited the office on foot. Says he has had connection with his wife with great relief to his testicles.

Jan. 20th, 1887. Mr. McD. has remained well since the operation. Wife has had two children since.

CASE VI.—**Rapid Dilatation of Urethra—Removal by Forceps—Weight of Stone, 60 grains—Recovery.**

Mrs. W., widow, æt. 33, has suffered for four years with decided vesical symptoms of stone—the diagnosis being confirmed by an examination with the sound. Case under care of Dr. U. G. Bigelow. On May 11th, 1866, while under the influence of chloroform, administered by Dr. B., I dilated the urethra and removed a phosphatic calculus the size of a large filbert, together with many fragments. The after treatment consisted in washing the bladder daily, the free use of demulcent drinks, tonics, together with hyoscyamus, uva ursi, pareira brava, with small doses of opium. In two weeks she made an excellent recovery.

About the middle of September of the same year, she complained to Dr. Bigelow of her old symptoms. The old treatment was tried, but not giving sufficient relief, on October 14th we again, while the patient was under the influence of an anæsthetic, dilated the urethra, and removed two small phosphatic calculi. After this she improved nicely, and has been comfortable ever since. No marked return of her old symptoms yet. She has occasionally suffered from slight cystitis. She has since been seen frequently, and is entirely well. July 10th, 1886, remaining well.

CASE VII.—**Rapid Dilatation of Urethra—Exploration of Bladder with Finger—Phosphatic Encrustation—Bladder Washed Out—Weight of Stone, about 90 grains—Recovery.**

Mrs. W., married, æt. 20, mother of two children. Usually had good health up to three years ago, when she first observed some trouble in urinating, and would occasionally pass a fine white sandy

looking substance, also some blood. Has received treatment almost constantly since.

May 2d, 1874, I first examined her bladder, but could not detect any calculus. During the next year, she at times received benefit from washing out the bladder. Took Bethesda water, also Saratoga Star Spring water, and the usual bladder medicines. Thought she derived more benefit from ten drops tincture of iron, with five drops dilute sulphuric acid, in a wine-glass of water after each meal. After taking this mixture for a few days, she would at times pass freely of the fine white sandy deposit.

On May 4th, 1875, not being as much permanently improved as she thought she ought to be, while under the influence of ether, administered by Dr. Snow, I dilated the urethra sufficiently with Heath's dilator to pass my index-finger into the bladder, and on the left side I could detect a rough coating of the mucous membrane, and succeeded in bringing away a number of small pieces of phosphatic calculus. The bladder was now washed out, and patient placed in bed. No unpleasant symptoms followed. The urine dribbled from the bladder for about four days, when she had perfect control over it. She made an excellent recovery.

January, 1876. Occasionally passes some of the white sandy substance, which I am inclined to think comes from the kidneys. She can now retain her urine three or four hours, while before it was impossible for her to leave home, being compelled to urinate every half hour or so.

October 1st, 1882. This patient I have seen often since the operation, and she has remained thoroughly well.

CASE VIII.—**Large Calculus—Rapid Dilatation of Urethra—Lithotomy and Washing Out of the Fragments—Weight of Stone, 328 grains—Recovery.**

Mrs. Y., æt. 65, married, and the mother of five children. She had an attack of renal colic fifteen years ago, and at that time passed several calculi, but recovered entirely. Three years later she had another attack, since which time she has suffered all the symptoms of vesical stone, with chronic cystitis. I saw the patient January 18th, 1887, with her family physician, Dr. Werner, of Cobleskill, N. Y., who had previously diagnosed vesical calculus. On sounding the bladder, it was evident that there was a large stone present. For the past year she had been obliged to push it back with a silver female catheter whenever she desired to urinate. A previous examination of the urine showed the kidneys to be healthy. The patient was operated upon on the 18th of January, 1877, Teevan's lithotrite being used. I crushed several times, and washed out with a Davidson's syringe; first, however, dilating the urethra with a Heath's urethral dilator, so that I could introduce the index-finger of my right hand. The operation lasted nearly an hour, the patient bearing the ether only fairly well. My first impression was to do a vaginal lithotomy, so well spoken of by Dr. J. Collins

Warren, of Boston, but the patient was so fleshy as to make it quite impossible to reach the parts. The stone was phosphatic in character, and the detritus weighed 328 grains. A distinct nucleus was found, probably a renal calculus. Some of the detritus was lost in a basin of water that was overturned.

During the afternoon of the operation, the patient suffered from a severe pain in her back, also vomited some. The vomiting, however, was soon controlled. Up to the evening hour there had been no sign of a chill. On the morning of the next day, January 19th, she was feeling comfortable; her skin was moist, and her pulse 92. She controlled her urine quite well, although its voiding was attended with some smarting and burning. She slept quite well, passing, indeed, a quite comfortable night, and from this time progressed to a favorable recovery. Discharged cured January 27th. Four years after was in good health; no bladder symptoms.

CASE IX.—**Renal Colic—Stricture of Urethra—Calculus Lodged Behind Stricture—Internal Urethrotomy; Removal of Stone and Recovery—Weight, 41 grains.**

Mr. J. R., æt. 36, occupation that of a wood-cutter and guide in the North Woods. Admitted to St. Peter's Hospital in December, 1876. Twelve years ago he contracted gonorrhœa, and was a long time in getting well. Nearly three years ago he had an attack of renal colic connected with the left kidney. Soon after he experienced increased difficulty in passing his urine, the stream being at times much reduced in size. About six months later he discovered, and could feel a hard substance in the perineum, and from that time on he had serious trouble in emptying his bladder. For the past few months he has been unable to work. By the use of bulbous bougies two strictures were detected, one about two inches down in the spongy portion of the urethra, the other in the membranous portion. Through the second stricture only a whalebone guide could be passed, and as it passed, it revealed a calculus in the membranous or prostatic portion of the urethra. The calculus could be felt from without. His urine was examined, but revealed no organic disease of the kidneys. He was given five grains of quinine three times daily, and ten minims tinct. ferri. chlorid. for two days, and on December 18th was put under the influence of ether. The stricture two inches down the urethra divulsed by an Otis's urethrotome; then a guide was passed through the lower stricture, upon which was passed a Maisonneuve tunnelled instrument, and the stricture cut. Thompson's long, slender urethral stone forceps were now passed easily down the urethra, and this stone removed, oblong as you see, measuring in its long diameter one inch, and in its circumference three-quarters of an inch, and weighing 41 grains. The stone was made up of oxalate of lime, with a crust of the phosphate. This patient had a chill a few hours after the operation, but by aid of full doses of quinine and iron, he went on to a perfect recovery. The strictures were treated by pass-

ing full sized steel sounds twice a week. A subsequent examination of the bladder with Thompson's short-beaked searcher was made, but nothing was found. Upon the removal of the stone, it became necessary to incise the meatus lightly. The patient was discharged cured March, 1877. February 1st, 1877, I had a letter from this patient, saying he had remained perfectly well. No return of strictures.

CASE X.—**Calculus in a Girl—Rapid Dilatation Practiced and Stone Removed Entire—Weight. 40 grains—Recovery.**

July 21st, 1879, I was requested by my friend, Dr. Barker, of this city, to see Miss W., aged 5 years, who had been suffering nearly two years with a bladder trouble. I found her in bed with her clothing wet. Her mother stated that the little girl was passing her water constantly, and with great pain, and that it was impossible to keep her dry. On sounding the bladder, we could feel a stone. She was given two grains of quinine three times daily, and an anodyne night and morning.

On July 23d, 1879, we proceeded to operate. Chloroform was administered, and the urethra quickly dilated with Heath's dilator, and with a small stone forceps this calculus, weighing 40 grains, was removed. It is composed of oxalate of lime, and, as you observe, is covered with numerous little spines, which must have caused great pain. Quinine was continued, and also demulcent drinks; and I am informed by Dr. Barker that the little patient went on to rapid recovery. Two years later, she was in excellent health.

CASE XI.—**Large Prostatic Urethral Calculi Removed by External Perineal Incision—Weight (large), 475 grains: (small), 210 grains—Recovery.**

Mr. A. F., æt. 19, was admitted to the Albany Hospital March 29th, 1879, as a case of urethral stricture. Ever since his third year the patient has been troubled with painful micturition, a burning, stinging sensation being experienced just after the act. He has also been compelled to get up two or three times during the night to pass urine. He says he never had gonorrhœa. On examination, it was found impossible to pass any instrument on first trial; and as further attempts gave him pain, it was decided to wait and anæsthetize him, and then make the examination a thorough one. The perineum was enlarged, as was also the inferior wall of the urethra along the lower half of its course. Hot applications were made to the parts, covered with oil silk. On April 5th, the patient took, at 10 A. M., ten grains of quinine, and at 12 M. was etherized. An exploration of the urethra detected calculi. A grooved sound was then passed, and an external perineal section performed, the incision being about 1½ inch in length. By the aid of the sound – the fingers being introduced into the rectum—a large, smooth calculus was expelled from the cut, which was directly followed by a second one. The wound was left to it-

self, a little lint being applied to soak up the oozing of blood. Hæmorrhage was slight. The patient was placed in bed, wrapped in warm flannel, and kept under quinine.

April 28th, symptoms of cystitis were noted. I ordered a warm sitz bath, and a prescription of potash. bicarb. and hyoscyamus. May 19th, the patient was etherized, and Nos. 10 and 16 English steel sounds were passed. June 9th, the patient was discharged cured. He was ordered to have full sized steel sounds passed at least once a week for two months.

The calculi are mostly phosphate of lime. The larger one weighs 475 grains, and the smaller one 240 grains. It will be observed that the larger one is a perfect cast of the distended prostatic portion of the urethra, even presenting the impression of the opening of the ducts, and that the facet of the junction of the two stones at the greater curvature of the urethra is very perfect. These are remarkable specimens of prostatic or urethral calculi, and undoubtedly were lodged there when the boy first presented symptoms at the age of 3 years. He has since been seen, and is in excellent health.

CASE XII.—**Piece of Chewing-Gum Introduced Into the Bladder—Removal by Bigelow's Operation—Weight of Fragments, 49 grains—Recovery.**

Mr. A. S., æt. 24, single, was admitted to the Albany Hospital September 5th, 1879, and the diagnosis of foreign substance in the bladder made. Six weeks before coming to hospital, the patient had introduced a piece of chewing-gum into his bladder. He had been treated, but without success. On September 7th, the searcher, (a steel sound with a short curve) was introduced, and the foreign body felt. The next day a consultation of the staff was held, and on again using the searcher, the substance could be felt; but when the lithotrite was introduced into the bladder, nothing could be found. It was concluded to wait a little. On the morning of September 9th, the patient had a severe chill. Cinchonidiæ sulphatis was freely given, and continued in two-grain doses every two hours. September 15th, the searcher was again introduced, and the body could be distinctly felt; indeed, an audible click was emitted by the encrusted salts of the urine. On September 14th, he had another chill.

On the 17th, the patient was put under ether, and with the lithotrite, pieces of the salts encrusted about the gum were brought away. Bigelow's evacuating tube, No. 29, was then introduced into the bladder, and his suction apparatus, filled with water, was attached. The water was gradually forced into the bladder, and, as it returned, the gum came with it, thus making the operation a complete success. The patient was put to bed, and ten grains of quinine given. The cinchonidia was continued as usual—two grains every four hours. About 11 A. M., September 18th, the patient had a severe chill. Ten grains of quinine were administered, and warm

applications made. At 8 P. M. another chill occurred. Temperature was 105°, pulse 140, and perspiration very profuse. After the 18th, the patient had no chills, and his improvement was continuous up to September 24th, on which date he was discharged cured.

CASE XIII. — **Large Phosphatic Calculus — Cystitis — Great Amount of Pus in the Urine—Medio-lateral Lithotomy—Weight of Fragments, 240 grains—Recovery.**

Dr. Henry M., æt. 42, two years ago last October, whilst visiting a patient during a rain storm, caught cold, and had an attack of acute cystitis. His professional duties did not allow him to get entirely over his ailment before he again went to work, and he thinks riding made the trouble worse. At times he had been troubled with spasm of the bladder, making it necessary to pass a catheter. The passing of the catheter upon these occasions, however, was attended by a pain so intense as to necessitate the administration of chloroform previous to the introduction of the instrument. At times, also, there has been a great deal of pus and mucus in his urine, and its condition was so acid as to scald severely on passing it. To relieve the burning, he was constantly in the habit of taking alkalies, also morphia and chloroform. He further complained of considerable pain in the end of his penis. On the 12th of October, 1879, the patient was put under ether, and the urethra and bladder examined. A number of strictures were found in the urethra. An Otis's instrument was passed, and the stricture in the spongy portion cut. One, or more, deeper down, were of large calibre, and admitted a No. 2 sound. A Thompson's searcher was passed into the bladder, and a calculus of quite large dimensions was found. With the lithotrite it seemed to be over two inches in length, and more than an inch in its shortest diameter. The patient was then allowed to come out of the anæsthetic, and was given five grains of quinine. Having a slight chill at 6:30 P. M., five grains more of quinine were given. This was vomited, however. At 9:30 the patient was doing nicely.

October 18th, the patient was put under ether, and the medio-lateral operation for lithotomy, by the rectangular staff, was done. Owing to the size of the stone, it was found necessary to crush and remove it in fragments. Length of operation, forty-five minutes. After the operation, the hæmorrhage became rather unpleasant, and the patient was again put under ether and another ligature applied, which, in addition to plugging the wound with a chemise, controlled the bleeding. The plug was removed October 18th, the patient doing nicely, and passing urine through both urethra and wound. On October 31st, the urine passed entirely through the urethra. Nearly one third was pus and mucus. November 4th, the urine was passed nearly clear. On this date a catheter was passed, after which urine escaped from the wound for a short time. Patient continued taking twelve grains of quinine in twenty-four hours. On November 7th, the patient came down stairs for the first time since

the operation, and on November 8th, he attended a clinic. At this time he was troubled with incontinence of urine. His pulse and temperature were normal, and he was feeling well. November 14th, he was up and moving about the hospital. Could hold his urine for two or three hours at a time. Pus had nearly disappeared from the bladder. The bladder was washed out daily. On November 18th, the urine appeared normal. On the 22d, a stricture two and three quarter inches from the meatus was cut with Otis's instrument. December 3d, the patient was discharged cured, and returned to his home. The stone weighs 345 grains, and could easily have been crushed and washed out by the Bigelow method, but in consequence of its size, and of the severe cystitis, it was thought best to cut.

CASE XIV.—**Large Phosphatic Calculus—Bigelow's Operation —(Lithotomy)—Weight of Stone, 348 grains—Recovery.**

Mr. C. H., æt. 60, was admiited to the Albany Hospital May 26th, 1880. About eighteen years ago he began to experience burning sensations about the urethra when passing water, and continued to have them at times (though not sufficiently unpleasant to cause any particular annoyance) up to about four years ago, at which time, after riding over rough roads, he had an attack of hæmorrhage from the bladder, lasting for a short period. These hæmorrhages would recur regularly every two or three weeks, and continued to do so up to about two years ago. At the time of the first attack of hæmorrhage, he had a severe pain in the lower portion of the left lumbar region, which lasted for two or three days, and required considerable morphia to relieve it. Upon his admission to the hospital, an examination with the sound was made, when a calculus was both distinctly felt and heard. He was now given ten-grain doses of potass. citrat. three times a day.

On May 29th, he was anæthetized, and a lithotrite passed. After exploring the bladder for some little time, the stone was finally engaged and crushed. The Teevan and Thompson lithotrites were used alternately. The instrument was then withdrawn, and litholapaxy practiced, drawing away considerable detritus. I used in this operation, as well as my other, Bigelow's original instrument. (At this time the rubber bag became loosened from its attachments, unfitting the instrument for use. I was therefore greatly indebted to Dr. Vander Poel, Jr., for the use of his improved Bigelow apparatus.) The foregoing operations were done consecutively several times, until the bladder was quite free from foreign matter. He was taken to his room, and ten grains of quinine were given. He had some vomiting before fully recovering from the effects of the ether. The first night following the operation he had a chill, the temperature afterwards rising to 102°F., and dropping by the third day to 95.5°. On the afternoon of the third day he had a second chill, followed by a temperature of 101.5°, which declined again by the fifth day. The patient was now given five-grain doses of

quinine three times a day. On the seventh day he had a chill, followed by a temperature of 103.6°, at which time one quarter drop doses each of tinct. aconite root and tinct. digitalis was given every hour, the temperature falling next morning to 101°. By the eleventh day it had gradually reached normal, remaining about so, with some slight exacerbations, until the evening of the fifteenth day, when, having had another chill, it rose to 103°. On the 1st of June, he was ordered to take triticum repens. On the 11th of June, he was put on tinct. gentian comp. On the morning of the 16th day, the temperature dropped to 101°, but on the same day, after a slight chill, it again reached 103°. On the 17th day, it fell to 99°, rising again to 101° in the evening. On the morning of the 18th day, the temperature was normal, but rose again in the evening to 101°. On the 16th day he had a severe chill, which sent the temperature up to 102.5°, falling, however, next day to 102°. On the 21st day, it rose to 103.6°, falling gradually by the 23d day to 99.0°, but that evening another chill caused it to rise to 102.5°. By the 25th day it had declined to normal. On the 27th day he had a slight chill, but with little rise of temperature, which dropped again to about normal, and so remained until the day of his discharge, June 30th, when he expressed himself as being in much better condition, both physically and mentally, than he had been before in years. On July 13th, I received a letter from the patient's family physician, Dr. Merritt, in which he stated that the patient had had a relapse as a result of overdoing, but at the time of writing he was much better and able to be about, and with proper care there was no doubt but that he would be as well as ever. Soon after, I had word from the patient that he was entirely well, passing normal urine in a natural manner, and again attending to business. The detritus weighs 380 grains, and is entirely phosphatic.

CASE XV.—**Small Phosphatic Calculus—Bigelow's Operation, with Rapid Recovery—Weight of Detritus, 60 grains.**

Mr. R. S. P., æt. 53, was admitted to the Albany Hospital September 13th, 1880. About three years ago the patient first noticed that he could not pass water as readily as usual. This slight impediment to the emptying of his bladder remained, and then there gradually came a feeling of weight, and a dragging pain in the region of the bladder; also some pain radiating up the track of the ureters. About eighteen months since, while urinating with the usual resistance, he noticed that a bloody discharge was coming from him. This, however, was the only time that blood ever passed him. He has complained of pain on passing water ever since he first noticed that something was wrong. For the past three months he has had to draw his water by means of a catheter. He had never suspected the nature of his trouble until recently, when, on sounding him, I discovered a calculus of small size, and suitable for the operation of litholapaxy.

This operation was performed September 18th, and a number of fragments of a phosphatic variety were removed. His temperature on the evening following the operation was 102°F., and pulse 100. These fell next morning—the temperature to 99° and the pulse to 80. The evening of that day (19th), however, they rose—temperature to 101° and pulse 85—falling again to 99°, pulse 70. After this, for a few days, the temperature was between 99° and 100°. No signs of a chill after the operation. Urine was withdrawn as required. About eight days after the operation, the bladder was washed out and sounded, but nothing was found. After this time the washing was continued once a day, nothing but a little mucus making its appearance in the urine. The patient was discharged October 2d, 1880, having been in the hospital nineteen days, and only fourteen after the operation. Later he came to my office, saying that he was feeling well, and could pass his urine in a natural manner. None of his old symptoms were troubling him. On sounding the bladder it was found free from any deposit. This case was somewhat remarkable, in that he had retention of urine while so small a stone existed in the bladder.

CASE XVI.—**Attempted Litholapaxy—Probable Tumor of Bladder—Weight of Detritus, 30 grains—Death.**

Mr. J. B., aged 33, married, native of the U. S., Rock City Falls, N. Y., admitted to Albany Hospital January 25th, 1881. When patient was 16 years old, was troubled with a painful burning sensation in penis while micturating. This would sometimes be so severe as to cause him to stop work. Patient also had pain in back, increasing with exercise. These pains would last a few days or weeks, and then he would be free from them for a short time, when they would again return. This condition lasted for about two years, when he was not again troubled for four or five years. At the end of this time he was attacked with renal colic. Acute parenchymatous nephritis followed, lasting for nine weeks. During this time urine was about 30 per cent. albumen. Patient recovered from this attack, but was not free from lingering pain across back.

Four years ago patient had second attack of nephritis. At this time urine was 95 per cent. albumen, with brick-dust deposits. This lasted for six months, pus making its appearance in urine. Patient partially recovered from this.

August, 1880, patient was taken with severe burning, dragging pains in region of bladder, with pain in end of penis; also pain on micturating increasing in severity. Now flow of urine suddenly stopped while urinating. With Thompson's searcher, a small calculus could be felt. Examination followed by free hæmorrhage. Hæmorrhage from bladder continuing—many clots of blood passing with urine. Pain radiating up ureters. No history of stone in other members of family. Examination of urine shows some albumen, but no casts. Ether was given.

On introducing the lithotrite, it caught a small stone, which

broke rapidly; but instrument became apparently entangled in the coats of the bladder, and instrument was withdrawn. On washing out, about thirty grains of oxalate of lime detritus was secured.

Chills ensued, followed by suppression of urine, and death.

No autopsy allowed.

CASE XVII.—**Litholapaxy Attempted—Detritus Too Great to Wash Out—Lithotomy, Lateral—Weight of Detritus from Litholapaxy 340 grains; Weight of Detritus from Lithotomy 750 grains—Death.**

Mr. T. B. F., aged 48, married, born in America, carriage maker, Cobleskill, N. Y. Admitted Albany Hospital, June 25th, 1881. About fifteen years ago, patient noticed a slight yellow discharge from urethra, but says he never had gonorrhœa. Soon after while passing water, the stream would stop, but on moving about stream would start again. Used nearly every kind of patent medicine, but did not apply to any physician till about six or seven years ago. Since that time has suffered somewhat during the act of micturition. Has not been able to work for three years. Family history good. Five or six attempts have been made to pass instrument, but have failed on account of extreme irritability of bladder and urethra. Urine contains pus and albumen but no casts.

June 25th, 1881, patient was put under the influence of ether. Sound was readily passed, striking stone in bladder. Bladder was then injected through catheter. The Bigelow lithotrite passed readily, stone being grasped. Measured on scale of instrument 1¼ inch in diameter. Stone was crushed and instrument withdrawn. The Thompson lithotrite was then inserted, but stone repeatedly slipped from jaws of instrument. The Bigelow was again inserted, with which the stone was crushed and the instrument withdrawn. Stricture of spongy portion of urethra was divided with Otis's urethrotome. The Thompson catheter staff was used and bladder again injected. The evacuating tube was passed and receiver was filled with small pieces of stone. Sound was again passed, and another large and hard stone detected. After several attempts to crush and remove stone, lithotomy was decided best. Operation most successful. Many pieces removed. Bladder washed out with warm water. Patient put to bed. Morphia, whiskey and milk given. Quinine, five grains three times a day. Vomited once. Checked by morphia, one-fourth grain every four hours, with bismuth and carbolic acid. Poultice over abdomen, and afterwards changed to hot water dressing. Vomiting returned with hiccough, which was checked by hydrocyanic acid, bismuth and champagne. Diet: milk, lime water, toast, and beef tea. Patient died July 3rd, 1881.

Post mortem held July 4th, 1881. Body much emaciated; some peritonitis and marked pelvic cellulitis. Bladder adherent to rectum. Abscess in front of bladder and in walls of bladder itself. Suprarenal capsules adherent. Phosphatic deposit found in pelvis of right kidney, the left being normal. Incision almost healed.

CASE XVIII.—**Lithotomy—Weight of Stone 71 grains—Recovery.**

Mr. D. W., married, native United States, farmer, Fairfield, Herk. Co., N. Y. Admitted July 2nd, 1881. An attempt was made July 11th, 1881, to crush stone, but the presence of instrument caused so much pain and spasm of bladder, that after two or three attempts to grasp the stone, it was deemed advisable not to go further. Patient discharged July 11th, 1881, improved.

Patient returned October 27th, 1881, and lateral lithotomy was performed. Was discharged November 3rd, 1881, much improved, and when heard from a year later was in good condition.

CASE XIX.—**Lithotomy Lateral—Large Stone—Weight, 1880 grains—Death.**

Mr. F. C., aged 57, married, native of Canada, axe-maker, Cohoes, N. Y. Admitted Albany Hospital, September 19th, 1881. Patient had had trouble when micturating for several years, suffering much pain for the last two years. Urine contained pus, but no casts. Sound was passed and a stone discovered. It was thought best on consultation of staff to perform lithotomy lateral. Stone was removed entire. Very little hæmorrhage followed. Patient was put to bed and given morphia and whiskey, with cans of hot water to back and feet. Did not escape chill on same day of operation. Whiskey and quinine were given freely, and four ounces beef tea per rectum at night. Chill was followed by temperature 103°, pulse 154. Vomiting came on. Respiration spasmodic in character. Patient died suddenly September 23rd, 1881. No autopsy permitted.

CASE XX.—**Litholapaxy—Weight of Detritus, 60 grains—Recovery.**

Mr. J. C., aged 42, married, native United States, mechanical engineer. Admitted Albany Hospital, October 6th, 1881. Residence, Schenectady, N. Y. About four years ago patient first noticed trouble in the passage of his urine, at which time while making water, the stream stopped suddenly, and a severe pain set in which lasted about two hours. After this he noticed nothing unusual for over a year, when the stream was again stopped suddenly. Since that time has been troubled more or less, and has adopted a position in which he passes his urine, and it relieves him. The position is on both hands and one knee, the other leg being straightened out behind him. At times, he noticed a scalding pain in the end of penis. For the last two years he has been troubled with prolapsus of the rectum, and for the relief of that, he has used an injection of water every day. His general condition is good. I saw him August 1st, 1881, and detected a stone in his bladder. Entered Albany Hospital, October 6th, 1881, and was again examined, and the stone distinctly felt with the sound by myself and Dr. Snow. Has been taking for some time, quinine sulphate, gr. j ter in die, and an occasional cathartic had been

given, as his bowels have been rather constipated for about two years. Family history good—father and mother living.

On October 7th, 1881, he was etherized by Dr. Snow, and employing the Bigelow method, I removed this specimen of stone in eleven minutes. Patient began to improve at once, and on Saturday, October 15th, eight days after the operation, he was able to walk down to the operating room. His urine was clear; bladder did not require washing out. He went on to rapid recovery in every respect, leaving hospital on eleventh day after the operation.

CASE XXI.—**Litholapaxy—Second Operation—Weight of Detritus, 380 grains—Death 3rd day.**

Mr. C. H., aged 65, married, native United States, Cherry Valley, N. Y., travelling agent. Admitted October 6th, 1881. July 7th, 1881, as patient was watering a horse, the animal squeezed him about the pelvis, and is sure that at the time his bladder was in some way injured. No bloody urine passed.

October 8th, patient was etherized, and employing the Bigelow method, I removed a large quantity of stone. Evidently there was more than one crushed. The operation lasted 1 hour, 10 minutes. Patient recovered from anæsthetic, and at 3.30 P. M., was given a hypodermic of one-fourth grain morphia, and a poultice was placed over hypogastric region. Was given as much milk as he would drink, and about 5 P. M., about 4 oz. of urine was drawn. He then slept well for about two hours. At 11.30, 2 oz, of urine was drawn off. Rested quietly till 5 A. M., when he passed ½ oz. urine, also at 7 A. M. At 8.30, 1½ oz. urine drawn. At 10.45, ½ oz. urine passed. At 10.50 A. M., took ℥ss. spirits frumenti. 11 A. M., glass of milk. 1 P. M., dose of citrate potash. 2.15 P. M., glass of milk. 4 P. M., dose of citrate potash. 4.30 P. M., drew off ½ oz. urine. 7 P. M., took dose citrate potash. Patient then slept for an hour. At 8 A. M., fresh poultice was applied. At 9 A. M. took quinia gr. ij and swallowed poorly. 1½ oz. urine drawn and hot water applied to extremities. Was bathed in alcohol also at this time. Pulse 132. At 9.30 P. M., milk oz. j. 10.25 P. M., whiskey. 10.35, milk. 10.50, milk. 11.05, hypodermic arom. spts. ammo., m. xij. 11.25, milk. 11.35, whiskey. 12.00, milk and fresh poultice. 12.20, quinia and whiskey. 12.40, milk. 1.20 respirations very much labored. 2.25 A. M., whiskey and quinia —pulse 160, respirations 28. At 2.45, hypodermic of whiskey and ammonia. He began to raise a thick, dark colored fluid, and breathing became more labored. Pulse 160, respiration 33. At 3.00 A. M., drew off oz. ij urine. 4 A. M., hypodermic of whiskey and ammonia, At 4.15, vomitted a dark colored material, and soon after died.

This patient, it will be remembered, made a good recovery from his rapid lithotrity, May 29, 1880, and stated that he remained well and in good health in all respects; was able to ride through roads until June 7th, 1881, when he was injured. Is it possible that the accident may have loosened some sacculated stone or stones, and

brought on all his old symptoms? When he came to my office to see about the last operation, he was very much depressed. His business had gone badly, and the thought of another operation discouraged him very much. From this feeling he did not rally at all, and after the operation showed no disposition to get well, and did not cheer up in the least. Was content to die, and so expressed himself.

Autopsy 24 hours after death. Body well nourished; no peritonitis; fundus of bladder attached to peritoneum; old adhesions at juncture of large and small intestines. Colon bound down. Appendix normal. Small intestines also bound down. Right kidney enveloped in large amount of fat, and capsule peels off easily. Kidneys were both contracted and exhibited a condition of suppurative nephritis. Ureters dilated. Quite extensive recent adhesions of bladder to peritoneum. No effusion into abdomen. Rectum adherent to bladder. Prostate glaud enlarged. In anterior wall of bladder, a large sack, where stone had lodged. Thorax and brain not examined.

CASE XXII.—**Litholapaxy—Weight of Detritus, 300 grains—Later, Lithotrity—Weight of Stone, about 40 grains—Recovery.**

Mr. J. L. C., aged 31, native United States, occupation, clerk. He was a patient in the hospital in 1870 for treatment of attack of acute gonorrhœa. In 1873, he noticed his stream of water growing smaller. In 1879, while in Portland, Oregon, he had an attack of retention of urine, and the stream stopped completely. The Doctor who treated him first used a catheter and then passed a sound, after which he felt better. In October same year, he was operated on, and the stricture of the urethra cut. He thought he had a stone in the bladder at that time. He had his bladder washed out regularly for two months. For three months before coming to Albany he had been sick in bed. October 10th, his bladder was examined, and a large calculus found.

September 14th, the bladder was injected and the stone crushed and removed. The Bigelow operation was performed. The instruments were introduced four times. Time 1 hour, 10 minutes. He was put in bed and stimulants given. A flax-seed poultice was applied over the bladder, and soon after one-sixth grain morphine was given hypodermically. Urine passed easily and at longer intervals than before operation. It contained more or less blood until the 18th. He had some diarrhœa on the 19th, which was readily controlled. On the 21st, the bladder was washed out with a solution of borax, one drachm to the pint of warm water. There was considerable sediment in the urine, pus. The temperature was not above 100, and generally about normal. The bladder was sounded the 29th and no calculus was found. He left the hospital October 8th—3½ weeks after the operation.

November 19th, taking iron and quinine internally. The bladder was washed out once a day. He sleeps well, can hold his urine

from four to six hours without any effort; causes some irritation on passing. General health improved very much. Has gained 18 pounds in weight; appetite good and his strength nearly returned.

About February 1st, 1882, a small fragment was crushed by the Thompson method, without taking an anæsthetic. February 18th, sounded again, but found no sign of stone. He is very comfortable. Cured.

This patient had such a fear of instruments that he would not after either operation allow the bladder to be properly washed out daily. Was made to drink freely of diluents. I saw him occasionally for two years after the operation, he remaining in excellent health, with no stone symptoms.

CASE XXIII.—**Litholapaxy—Weight of Detritus, 75 grains—Recovery.**

Mr. W. D., aged 53, married, native of Ireland, laborer, Albany, N. Y. Admitted April 18th, 1882. Patient gives history of passage of renal calculus about sixteen years ago, and soon passed through the urethra a stone about the size of a plum pit. He has suffered all the usual signs of stone.

April 20th, 1882, he was etherized and Dr. Snow performed the Bigelow operation, which lasted one hour. He rallied nicely from the operation, suffered but little and made a good recovery. Though the stone in this case was small, yet the Doctor had much trouble in grasping it, as it seemed to float about, and would occasionally hide, as it were, in some sac. When caught, it broke readily with a distinct sound. This patient was entirely well two years after the operation.

CASE XXIV.—**Candle-wick as a Nucleus—Litholapaxy—Weight of Detritus, 240 grains—Recovery.**

Mr. D. B., aged 53, single, native U. S., boat captain. Admitted July 24th, 1882. Discharged August 21st, 1882, improved. About thirty years since had gonorrhœa, and eight or nine years after had another attack of it; no stricture or other difficulty either time, as far as he knows. About two years ago noticed soreness of urethra, also extending into the bladder, which, in about two weeks, was recognized as cystitis, necessitating cessation from labor, and since that time has been unable to work. This patient admitted that at the time of his cystitis developing, he had practiced masturbation by introducing a portion of candle-wick into the bladder. It slipped from his fingers in the excitement, and passed into the bladder. It is to be observed as the nucleus of the stone.

Family history: Father died, aged 75 years, of old age. Mother died of phthisis, aged 50 years. One sister died aged 40 and another aged 43 years, of debility. Has one brother and two sisters living and in good health.

Symptoms of stone for two years. Condition good: urine carefully examined; no evidence of disease of the kidneys. Stricture in spongy portion of urethra first cut; stricture in membranous portion divulsed, and litholapaxy done July 27th. No untoward

symptoms following. Detritus phosphatic. Bladder washed; patient sounded twice. No evidence of stone. Made an excellent recovery.

CASE XXV.—**Litholapaxy—Weight of Detritus, 660 grains—Recovery.**

Second operation done about a year later at Scranton, Pa., by Dr. Keyes, of New York. Mr. J. W. R., aged 36, married, native U. S., clerk, Scranton, Pa. Admitted Albany Hospital August 22d, 1882. In December, 1871, had an attack of renal colic, lasting about six weeks. About one year later had a second attack of renal colic, lasting about three weeks. In 1873, first noticed pain at end of penis; also at times some blood oozing from meatus after voiding urine. These, together with other symptoms of vesical calculus, had persisted nntil the present time. In 1875, had third and last attack of renal colic. During the tenth day of this attack, he passed a gravel as large as a pea. No history of stone in the family, but one uncle had gravel. Operation of lateral lithotrity was performed August 22d, 1882, at 12 M., lasting about one hour. Patient had no chill or unfavorable indication of any nature. September 1st, patient had diarrhœa; urine decomposed on passing. September 2d, diarrhœa continues, bladder washed. Patient complained of pain in head and chest. September 5th, pulse, 80. Temperature rose to 104¼° this A. M., but fell to 92½° in the evening. No apparent cause; patient feeling very comfortable. Urine looking better; sp. gr. 1008 and no albumen, crystals of phosphates, a small amount of blood and pus. September 19th, passed two stones, each about the size of a pea. Evening—complains of pain in the end of penis. September 13th, left the institution to stop with a friend in town, and returned to hospital from time to time. Evening—Patient returned with hæmorrhage from urethra or bladder. Has passed clots and bloody urine before. September 14th, evening—Patient still passing bloody urine per catheter. Urethra plugged with clots. Bladder was washed out daily with a solution of borax, ℥ j to the pint of warm water. He gradually improved and returned to his home feeling very well. I sounded him twice after the operation, when he had ceased passing detritus, and failed to detect any portion of calculus.

February 10th, 1883, I received a letter from Mr. Russell's physician, Dr. Newton, of Scranton, Pa, wishing me to come on there, stating that Mr. Russell had another stone, and desired me to do a second operation. While making arrangements to leave some urgent cases, and having a proper understanding as to terms, etc., Mr. R. became impatient and sent to New York for Dr. Keyes, who responded at once, and went on and removed, without any trouble, a small phosphatic stone, February 17th, 1883. Patient made a rapid, clean recovery.

CASE XXVI.—**Litholapaxy—Recovery—Weight of Detritus, 420 grains—Death Seven Weeks After Operation from Acute Diarrhœa.**

Mr. G. N. N., aged 67, married, three children, good habits.

Seven years ago had typhoid fever. Some time after noticed trouble in passing urine. Has had no renal colic. Was under treatment for cystitis. Two weeks ago was sounded, and a stone was found in the bladder. Came to Albany Hospital October 19th, 1882. Another sounding was done, and the diagnosis confirmed. Stone is large, firm and solid. Condition of urine favorable; alkaline reaction; sp. gr. 1008; no albumen; oxalate of lime crystals present; patient has to use the catheter to empty his bladder; used it two years,

Anæsthetized. Thompson's sound introduced; a stricture found in spongy portion. Urethrotome passed and stricture cut; sound enters the bladder; a distinct click is heard; exaggerated by means of the sounding board. Bigelow's lithotrite used to crush the stone, which measured one and a half inch. All washed out except one piece, which it seemed necessary to leave for another operation; this operation lasting fifty minutes. Bladder was washed out occasionally with a solution of borax. Was put to bed and means used to prevent a chill. October 28th, temperature 103° after the operation. The next morning temperature was 100°; now it is 99°. Desires to urinate every two hours, Has passed urine voluntarily; catheter used three times. General condition good. February 27th, 1883, ten days after the operation, the remaining piece was crushed. Three weeks after the first operation he had a severe diarrhœa. No treatment would stop this, but he gradually became weaker, and died seven weeks after the first operation. Bladder symptoms had all abated.

[TO BE CONTINUED.]

ART. II.—**Rational Medicine versus Empiricism.*** By B. A. WATSON, A. M., M. D., Surgeon to Charity, St. Francis and Christ Hospitals, etc., Jersey City, N. J.

The proper consideration of our subject demands a careful investigation of the fundamental principles involved in the practice of each.

Rational Medicine takes cognizance of the nature of disease, including its etiology, semiology, pathology, etc., and likewise the physiological action of remedies, while we seek to counteract the morbid processes of the one by the influence of the other. Furthermore, it is equally important that the rational practitioner of medicine should thoroughly understand the physiological and chemical laws which pertain to the performance of the various functions of the sev-

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eral organs of living beings, in order that he may intelligently regulate the hygienic and sanitary conditions of his patients. In addition to all this, it is highly important that every disciple of the Great Hippocrates should possess a practical knowledge of the sciences which are allied to those of medicine, that he may be thus strengthened and the better prepared for the performance of the high duties of his profession.

But scientific attainments are not the only prerequisites demanded for the practice of rational medicine. The physician must possess that faculty which enables him to reason accurately—to draw his scientific conclusions with unerring certainty. He must be able to analyze every symptom of disease, and, by every logical induction, give to each its proper place in the mental picture which is the basis on which stands every accurate diagnosis. It is thus apparent that the *rational practice of medicine* is based on scientific knowledge and scientific reasoning.

The most important question with which we have to deal at the present time is, *What is disease?* Disease may be defined as a deviation from the normal standard of health in which there is a change, either in the position and structure of the parts, or in the exercise of one or more of their functions, or in both. The ancients defined disease as an enemy which savagely seizes on the body; while they regarded the remedial agent as a champion which comes for the relief of the patient. They further spoke of the diseased organ as the scene of the conflict, and firmly believed that the result of the battle depended entirely on the relative strength of the combatants. Therefore, if the patient recovered, he was supposed to owe his life entirely to the potency of the remedial agent; but if he died, it was because his mortal enemy, disease, had triumphed over his friend. These opinions, which were so clearly expressed by the ancients, are still the essential views of the profession in our time.

The existence of organic lesions as a result of organic disease, which were first described by Morgagni, have been carefully studied since his time by many of the ablest members of our profession. The knowledge which we now possess

of these lesions is not limited to the gross and microscopical changes which arise in the various organs and tissues of the body as the result of a definite disease, but likewise includes the pathogenesis of the malady. The remedial agents, when rationally or scientifically employed, are directed to the removal or alleviations of these morbid conditions.

The primary question is, What has produced these pathological changes? In other words, what is the pathogeny of the special disease which the physician has been called to combat with his remedial agents? The answer to this question is equally important, whether it bears chiefly on the prophylactic or the curative treatment of the case, since the removal of the cause is very frequently the first, and sometimes the only step required for the complete restoration of the patient. Furthermore, the employment of a suitable prophylactic—which may be simply the observance of certain well-known hygienic laws—generally prevents a repetition of the disease.

In illustration of these points, the attention of the profession is called to the fact that the cure of parasitic disease simply requires the removal or destruction of the whole progeny of parasites; while the curative treatment of malarial fever is materially aided by the removal of the patient to a non-malarial district, which will commonly prevent subsequent attacks of this disease, until the patient is again subjected to the same influence which originally produced it.

Let us here briefly consider the *origin, nature and cure of scabies*, since it typically represents the entire class of parasitic affections. This disease is characterized by a simple inflammation of the skin, produced by the "*acarus scabiei*" and the scratchings of the patient. The malady is contagious, since the *acarus scabiei*, by which it is caused, is easily transferred from one person to another; while it is promptly cured by the proper use of sulphur. The ancient metaphor, which declares that disease is an enemy and the remedial agent a champion which wages war in behalf of suffering humanity, seems especially applicable in this instance; since the application of this drug cures the disease by killing the parasite—after which unaided nature quickly heals the lesion.

Scientific investigation has here revealed the cause and nature of this malady; while experimental study has demonstrated the fact that certain drugs possess germicidal properties; and the rational practice of medicine requires that these remedial agents should be employed in the treatment of itch and other allied affections. *The Rational Practice of Medicine is based on the recognition of a material cause of disease, and a material and potent efficacy in the remedial agents, which should be scientifically employed for either the cure or alleviation of the same. Are these grounds tenable?* Do diseases arise, as was asserted by Hahnemann, from spiritual causes? Do drugs cure diseases, as was declared by the same authority, by their spiritual agency? Have these assertions which were made by a prince of charlatanism, any scientific foundation? Are they not the ravings of a maniac, or the impious utterances of an atheist? Have we not learned from philosophy that there is no effect produced without a cause? Are earthquakes caused by spiritual agencies? When the last question has been answered in the affirmative, and when the correctness of the answer has been demonstrated by scientists, and this opinion accepted by the scientific world, then the intelligent physician may be ready to admit that disease and pestilence take their origin from spiritual (dynamic) causes.

Let us now return to the consideration of the original question—Does disease arise from a material cause? The microscope has enabled the scientist, since Hahnemann wrote on this subject, to investigate this question with complete success. They have absolutely demonstrated the fact that many of the contagious diseases are caused by parasites, while others take their origin from minute organisms or germs. The study of the etiology of cow-pox has demonstrated, beyond the possibility of refutation, the fact that this disease is always caused by a living organism. The same may also be asserted of variola, and many other kindred affections. Careful and thorough biological investigations have also shown that every living organism or germ takes its origin from pre-existing living organisms. It has been further demonstrated that these minute organisms and

germs are floated by the air, and merely require a fertile soil where they promptly reproduce their kind.

We have now reached a point in our essay where it is deemed wise to ask the question, What is Empiricism? in order that we may differentiate between the empiric practice of medicine and the rational method.

History informs us that a sect of physicians, formerly designated by the name of Empirics, originated with Philinus, a pupil of Herophilus and with Serapion, the successor of Philinus, and that they were the advocates of the skeptical philosophy of Pyrrho. It is, therefore, evident that this school of medicine began its career about three hundred years before the birth of Christ, and was not consigned to its grave until about one hundred and fifty years after the occurrence of this important event.

These ancient Empirics principally occupied themselves with the discovery of the medicinal properties of drugs, while they neglected almost entirely the study of anatomy, pathology, physiology, chemistry and the other sciences allied to medicine. It will thus be seen that this sect of physicians rejected nearly all the aid afforded by scientific investigations, which had been garnered by their predecessors during the past ages; and thus, untrammelled by knowledge or theory, started boldly on the new road, lighted only by skeptical philosophy. It would, therefore, seem that this sect of physicians has been not improperly classed with their modern confreres, who are frequently designated as quacks or charlatans. It is, however, probable that the Empirics increased somewhat our knowledge of the medicinal properties of drugs; although this is not proven by the fact that Serapion recommended for the cure of epilepsy the brains of the camel, the renet of the sea-calf, the heart of the hare, the blood of the turtle, the testicles of the wild boar, and the excrement of the crocodile.

Rarely has modern Empiricism made so irrational a suggestion as that which originated with the ancient founder of the Empiric sect. It has already been observed that this sect spent the most of their time in experimenting on drugs; and in this course they have been imitated to some extent

by Hahneman and his followers. Hahnemann, like Philinus, also devoted much time to the study of the symptoms of disease, while both alike entirely neglected its causation and its resulting pathological changes.

Hahnemann's experiments with drugs were based on the absurd and unscientific hypothesis that the symptoms produced in a healthy person by the administrations of a drug, accurately represent the disease which the same drug will cure. It was on this basis that he formulated the law of "*Similia similibus carantur.*" How senseless seems the twaddle of the founder of homœopathy when viewed by the light of modern science. He taught that disease is to be regarded as consisting essentially of the symptoms as experienced and expressed by the patient, or detected by the physician; in other words, that the chief symptoms, or "the totality of the symptoms," constitute the disease, and that disease "is in no case caused by any material substance, but is only and always a peculiar and virtual dynamic derangement of health." "Diseases will not cease to be spiritual dynamic derangements of our spiritual vital principle;" while he says in another part of the "*Organon*," "for as far as the greatest number of diseases are of dynamic (spiritual) origin and dynamic (spiritual) nature, their cause is therefore not perceptible to the senses." He likewise adds, in the same work from which I have just quoted, when referring to "small-pox, a disease accompanied by almost general sup puration," "is it possible to entertain the idea of a materia morbific matter being introduced into the blood?" He also declared that scabies had its origin in a "psoric miasm, of which the itch is the outward and visible and comparatively harmless sign," and was "at the root of nearly all chronic disease, viz., of all chronic disease that was not due to syphilis or sycosis." The views of the same author on the *modus operandi* of medicines, as expressed in his writings, are equally as irrational and erroneous as those which have just been recorded on the subjects of small-pox and scabies.

Hahnemann claimed that drugs, when administered to healthy persons, produce the symptoms of disease. The symptoms thus produced in healthy persons were adopted

by him as the only test required for the determination of their medical fitness for the cure of disease. This experimental process was designated by him technically as the "provings," and this peculiar property is spoken of by him as the pathogenetic power of the drug. This new therapeutical doctrine is still accepted by the homœopathic physicians as the basis on which they employ their remedial agents. They still claim that there is a correspondence between the symptoms produced by any given drug administered to healthy persons and its power of curing any given disease; and consequently the best remedy for any set of symptoms, "in their totality," is that drug which, given to any healthy person, will produce the most perfect imitation of the said group of symptoms; and hence the application of the phrase, "*Similia similibus curantur.*"

Another remarkable feature on which the homœopathic practice of medicine is based, is that of attenuation, by which the founder of this system professed to cure disease without injuring the patient. He gives very careful directions for the accomplishing of this object, which is mainly effected by trituration, succussion and dilution. By these processes he claimed to develop "the spiritual power which lies hid in the inner nature of medicine." Hahnemann claimed that medicines became, for curative purposes, more powerful as they became more attenuated.

The following directions for the preparation of these *spiritual potencies* are copied from Hahnemann's *Organon*, fifth American edition; translated from the fifth German edition by C. Wesselhoeft, M. D., and published in 1886 by F. E. Boericke, Hahnemann Publishing House, Philadelphia. We find on page 223 (147), 287, xxx:

"That if a drop of medicinal fluid is shaken up *once* with one hundred drops of alcohol—that is to say, if the vial containing both has been subjected to a vigorous downward stroke of the arm while the vial is held in the hand, an exact mixture must have taken place, but the mixture of both will be made far more intimate by two, three, ten or more such strokes—*i. e.*, the medicinal power will have become more highly potential, and the spirit of the medicine will have been unfolded and developed in a higher degree, and made far more penetrant in its effects upon the nerves.

"Now, if these high dilutions are to serve the desirable purpose of diminishing the dose, and of reducing its effects upon the organisms, it would be well not to shake each of the twenty or thirty vials more than twice, so that the medicinal may be but moderately developed. It would also be proper not to extend the time of trituration too far in making dry powder dilutions, *e. g*, a grain of some crude substance, having been mixed with one hundred grains of sugar of milk, should be triturated vigorously for only an hour; a grain of this trituration, mixed with one hundred grains of the sugar of milk ($\frac{1}{10000}$ dilution) should also be triturated for an hour, and the third dilution ($\frac{1}{1000000}$), prepared by mixing a grain of the preceding trituration with one hundred grains of the sugar of milk, should also be triturated for one hour, whereby the medicine is brought to a state of dilution, possessing a moderate development of strength."

The great efficacy of infinitesimal doses of medicine is further vaunted by the same author in the work from which I have just quoted, in which he says that "homœopathic remedies will act with the greatest certainty and efficacy, particularly by smelling or inhaling them in the form of vapor emanating continually from a dry pellet, impregnated with a highly rarefied medicinal solution, and contained in a small vial."

He further adds that he "could scarcely name one disease which, in the last year," he and his assistants had not treated with the most happy results by means of "olfaction;" and that even a patient destitute of the sense of smell may expect an equally perfect action and cure from the medicine by olfaction.

In the appendix to the *Organon* is found a laudatory article on the subject of mesmerism, which he claims is a most valuable curative agent. He says:

"This remedial power, the existence of which is often denied, is imparted to the patient by the touch of a well disposed person, exercising the full strength of his will. It acts in part homœopathically, by exciting symptoms similar to those of the disease to be cured, and is applied for this purpose by means of a single pass or stroke of the hands held flatwise over the body, and carried, during moderate exertion of the will, from the crown to the tip of the toes: (1) This process is efficacious in uterine hæmorrhages, even

when death is imminent. * * * (2) But the most remarkable instances of the communication of human power were witnessed in the resuscitation of persons, who, after having lain in a state of apparent death for a long time, were acted upon by the powerful will of a well disposed man in the prime of life and vigor. (3) History records several undoubted instances of this kind. These methods of applying mesmeric power depend on an influx of vital power from one body into another. It is, therefore, called *positive* mesmerism. (4) But there is another method of applying it, which produced a contrary effect to the former, and is, therefore, known as *negative* mesmerism. Of this kind are the mesmeric strokes employed in awakening persons from a state of somnambulism, as well as those manifestations known as 'calming' and 'ventilating.'

* * * "The safest and simplest means of discharging the excess of vital power accumulated in some portion of a vigorous organism consists in the application of negative mesmerism by means of the right hand with its extended palm, held parallel to and about an inch from the body, and carried by a rapid motion from the crown of the head to the tips of the toes. (5) The more rapidly this motion is made, so much more effective will be the discharge of vital force."

We have presented in the above extracts from a standard homœopathic author, these comments upon mesmerism, in order that the rational practitioner of medicine may carefully examine the same from a scientific standpoint. Behold the marvelous effects of this mighty remedial agent, which "*acts in part homœopathically*," while it restores the dead to life, and by slightly changing the order of the jugglery, kills the living. It is claimed that this therapeutic agent acts in accordance with the law of "*Similia similibus curantur;*" but why withhold from it the spiritual agency by which other homœopathic remedies are said to cure disease? Is it because the disbeliever in these juggleries may marvel at the influence of the "powerful will of a well disposed man" "in the resuscitation of persons who, after having lain in a state of apparent death for a long time?"

Is it not equally as rational to assume that man possesses a spiritual agency which he may employ as a remedial agent, as it is to attribute this power to mineral and vegetable substances? It would certainly harmonize with the theory ad-

vanced by Hahnemann for the explanation of the action of drugs, to recognize in mesmerism a spiritual power similar to that which he claimed existed in minerals and vegetables.

If it is true that drugs cure disease by the "spiritual power which lies hid in the inner nature of medicines," then are we not placed in a position where we are compelled to recognize the agency of clairvoyance as an aid in the practice of our art; since it is a power attributed to a person in the mesmeric state, of discerning objects not otherwise perceptible to the senses? The rational practitioner of medicine has *always claimed* that every disease takes its origin in a material cause, and not in a spiritual one; and that the cure or alleviation of the same can only be effected by a material power. The homœopathists, on the contrary, recognize in Hahnemann, the messiah, who revealed the doctrine of its spiritual action, and thus regenerated the medical world. It is on this basis that they rest their faith in the efficacy of the infinitesimal doses of drugs, and claim to effect the cure of disease. It was on this basis that Hahnemann made, and that his disciples still continue to make their experimental examinations of drugs, and thus establish that which they technically call " provings."

This peculiar medical theory propounded by Hahnemann followed the publications of Swedenborg on religious subjects and those of Messmer on animal magnetism; but its doctrines, nevertheless, seem to be more closely allied to those of modern spiritualism.

The entire antagonism between the Rational practice of medicine and homœopathy is wholly based on the fact that spiritualism, properly speaking, is the opposite of materialism. It will, therefore, be readily perceived that " Faith Cures " may be properly regarded as essentially a part of the homœopathic practice.

It is, however, true that many of the dogmas of Hahnemann differ widely from the well established views held by the ablest physicians in every part of the world. Hahnemann taught that nature is a bad physician, and that drugs are the real curative agents provided by the munificence of the Almighty for the alleviation of human sufferings. The

Rational physician, on the contrary, recognizes the fact that nature is the great restorer, and that without her co-operation the best directed efforts would end in complete failures. The truth of this has been demonstrated repeatedly to the entire satisfaction of physicians as well as surgeons. The correctness of the opinion expressed in the above statement, fortunately, does not rest merely on clinical observations, but has been clearly demonstrated by the most thorough scientific investigations.

Let us momentarily give our attention to the *modern treatment of open wounds.* Has it not here been demonstrated to the entire satisfaction of every surgeon that nature is the great restorer? The surgeon no longer expects to promote the healing of a wound by the use of warm poultices, greasy ointments, or useless drug lotions. He has demonstrated the fact that nature is the only healer, and is, therefore, contented to busy himself in *scientifically avoiding* or *destroying her enemies*, and procuring those conditions which enable her to accomplish her work in the most satisfactory manner.

How do the results of treatment of open wounds now stand, when compared with other ages? *This is the "golden age" of surgery.* There is no period in the past ages which can be compared with it. The results obtained in the modern wound treatment are *unparalleled in surgery.* How was this system that has yielded such grand results attained? Was it by a spiritual revelation, or does it recognize any spiritual agency in the causation of the disease or traumatisms with which it deals? Does its unparalleled success depend on some undiscovered and undiscoverable spiritual agency which exists in the remedial agents employed in this treatment? No! The discoveries which led to the adoption of this treatment were made by careful scientific investigations. Science revealed to us the obstacles that were to be overcome in the treatment of these wounds. Science and reason enabled us to perfect this method of treatment. These grand results were only attained by the rational application of the knowledge which had been gained, chiefly, through the careful study of biology, microscopy, chemistry and therapeutics.

During the last quarter of this century, while surgeons have been busy in working out these great surgical problems, physicians have not lagged behind them. *Scientific medicine* has made rapid strides in all her departments. The primeval darkness which then enshrouded the etiology of so many diseases, and thus enabled the visionary members of the profession of medicine to attribute the origin of every disease to a spiritual agency, where the cause was not visible to the naked eye, and who saw in the recovery of every patient a spiritual manifestation, has been rapidly dispelled by the use of the microscope and various other modes of scientific investigation.

Nearly the same may be said of the progress which has been made, during this period, in the study of the physiology, pathology and treatment of diseases. It is a well-known fact that even Rational medicine. in very many respects, is a daughter of Empiricism, and why should this admission cause a blush to appear on the face of the most sensitive physician; since the wisest sage was an infant before he became a man; and medicine must necessarily pass through a certain experimental stage before it can be recognized as a science. How, otherwise, could the medicinal properties of drugs have been ascertained? Who could have known, without experimenting, that quinine would act as a curative agent in cases of malaria, or that morphine would relieve pain and induce sleep? Let us, therefore, freely acknowledge our many obligations to that faithful band of workers who have given us so much valuable knowledge by their experimental labors in the great field of medicine, even though they may have been merely Empirics, or common charlatans.

It is the acknowledged duty of every Rational physician to accept and employ the best remedial agents which are known for the cure or alleviation of disease, without prejudice or bias. He cares not whether this agent cures disease in accordance with the opinion expressed by Hahnemann in his doctrine of "*Similia similibus curantur*," or in accordance with the principles enunciated by Galen in the doctrine "*Contraria contrariis*." The true physician desires to effect

a cure, while neither his honor nor reputation is involved in the maintenance of any special theory. He never forgets that he is *a physician—not* an allopath, which is merely a term of derision applied to him by Hahnemann. Let us continue to hold fast to all things which have been proven to be good, discard the worthless, and prove the value of all innovations by the crucial test of science and sound judgment, before we employ them in our practice with the expectation of alleviating the sufferings of humanity.

He who professes to be a Rational physician has no right to perform any professional act—however trivial it may be—unless he is able to defend the performance of the same on a scientific and logical basis. Scientific principles—not visionary theory—is the basis on which you are to stand. Careful clinical observation having shown that a certain drug possesses the power to either cure or alleviate a certain disease, it may then pass from the domain of experimental use to the field of legitimate medicine, and be sanctioned as a Rational practice.

In other instances the physician, who understands thoroughly the nature of the disease under consideration, as well as the power of the drug, may rationally recommend its employment in a case, although it had never been previously so used. Thus acted Prof. Alonzo Clark when he employed, for the first time, opium in the treatment of acute peritonitis. He knew that the use of opium would relieve the sufferings of the patient, and, at the same time, arrest the peristaltic acting of the bowels, and thus put an end to the extension of the inflammatory process, when nature would remove, by its well-known physiological action, the inflammatory products already effused. The treatment thus introduced possessed the merit of being strictly scientific, and, at the same time, perfectly rational—while its employment by the profession has been attended with a high degree of success.

It has been my desire, in this essay, to bring before you those fundamental principles involved in the *Practice of Rational Medicine*, rather than to attempt to amuse you with a tirade against the various forms of empiricism; since it is certainly

more pleasant to raise up your own house than to pull down your neighbor's. My preparatory reading for this paper included an examination of Hahnemann's "*Organon*," and the views which I have expressed are conclusions *based generally* on this work. It is also well known that this book, by all homœopathic physicians, is accepted as their highest standard on all subjects upon which it treats—in fact, it is to the homœopathist what the Bible is to the true Christian. It contains for them the divine law—the new revelation in medicine, and the opinions of the great messiah, of whom Dr. Charles J. Hempel has said that—

*"Even our opponents must admit that if, in the fullness of time, the God-appointed architect of a true system of therapeutics should make his appearance, he will prove to be a man peculiarly fitted for his work—endowed not only with a high order of intellect, with indefatigable energy, and the flash of genius, but with all those delicate, unerring susceptibilities which we contend Hahnemann possessed. If he was a God-appointed reformer of the old system of medicine, we certainly cannot be charged with extravagance if we claim for Hahnemann a keenness of sensibility to medicinal impressions which, for aught we know, may have exceeded those of any of his contemporaries; at all events, they must have been adequate to the task he had to perform, of revolutionizing the materia medica and establishing the new system of therapeutics by means of successive provings of drugs upon himself and his disciples."

This same authority, who was apparently unable to detect either fraud or delusion in Hahnemann's experimental provings of drugs, has been grievously annoyed by the doubts expressed by others on this subject, and replies to them in the following eloquent outburst of oratory:

†"To hear such a man as Hahnemann, the gifted son of Heaven, whom the wise and good Hufland delighted to honor as a friend and brother, traduced by the brainless multitude of common leechers and calomel venders, or by the arrogant pedants who fill professors' chairs in allopathic colleges, men who, under the cover of their parchments, and the semblance of ethical morality, permit themselves to practice the most cruel deception and extortion on their patients, is

*Materia Medica, 2d Ed., Vol. I., p. 20.
†Ib., p. 21.

enough to make an honest man's blood boil with indignation. May God have mercy on their nameless frames when the memory of Hahnemann shall be wreathed in the temple of immortality with the homage of a redeemed humanity."

The same homœopathic author, who so highly extolled Hahnemann, afterward admonishes the disciples of this spiritual school of medicine in the following language:

*"Let us not, therefore, forget that homœopathy should not be to us simply a fat cow that yields us plenty of milk and butter, but a divine goddess whose name is *truth*, and whose form is beauty. He who wishes to be a genuine high-priest in her temple should aid in building it up."

Gentlemen, we have presented to you the fundamental principles of Rational medicine and likewise those of Homœopathy. The former is firmly based on the rock of science, and the latter upon the wild mysticisms of a degraded spiritualism. The practice of the former demands the rational application of scientific principles for the cure or alleviation of disease, while the later caters to ignorance, superstition, and a visionary faith in spiritual powers which are entirely unknown.

*Ib., p. 67.

Correspondence.

Effect of Quinine on the Feathered Tribe—Effects and Uses of Cocculus Indicus—Suggestions as to it and Bromide of Calcium in Epilepsy, etc.

Mr. Editor,—About two years ago I was called to see a patient suffering from impacted rectum, about twenty miles from Baltimore. After relieving the patient, and while awaiting the arrival of the return train, my admiration was excited by seeing a fine rooster parading his flock about the yard. Remarking that it was a fine-looking specimen, the owner asked me if I had ever seen a drunken rooster. I replied that I had seen only chickens, pigeons and fish intoxicated by the fishberry or the Indian berry, as it is called in England. She then said that not long before, in cleaning

out a box of odds and ends one morning, she found a lot of two-grain *quinine pills*, sugar-coated, which had become stained by keeping and by contact with buttons and other traps in the box. She threw the pills, ten in number, out of the window into the yard. They were at once *picked up by the rooster* then before us. In about two hours the animal began to walk oddly, and, in a little while, to pitch about, and soon was unable to walk at all. He then laid down behind the house, where he remained until after breakfast the next day, not attempting to go to roost with the other fowls. The lady found him the next day apparently all right, only that he appeared indisposed to move about, though able to walk when made to do so. This patient had swallowed twenty grains of quinine at one dose, and suffered only from profound cinchonism.

This condition seems to have lasted longer than the intoxication induced by the fishberry on fowls and on fish, especially on these last, which, if allowed to remain in their native element, may and often do recover their activity, but which, of course, quickly die when thrown on the shore to sleep off their drunkenness in an everlasting sleep.

In these humane days, however, we rarely hear of the cocculus being wasted on fish, or even being used as a medicine, though we know of no special vigilance exercised by the "Society against Cruelty to Animals" in securing man against the full effects of this same fishberry in the adulteration of beer.

In the trade this berry is known as "*Indian berry*," probably a name less likely to inspire terror in the hearty lovers of the beverage. It is much used to increase the intoxicating power of beer, and the quantity of this adulterant imported into England is really enormous. Commonly, it is understood to be imported from the coast of Malabar for use among the tanners and dyers; but there is a so-called "extract," sold in casks, under the name of "bittern," and which is said to be composed of this same cocculus indicus, with extract of quassia to add to the bitterness of the beer, with liquorice to impart color, and sulphate of iron to give an additional froth to the fluid. It is said that

the copperas is especially useful in the manufacture of porter, or stout, as giving the peculiar flavor to porter and to half-and-half, when drunk from the pewter pot so common in ale houses throughout England.

These little matters are considered of far less importance than the care of blind, broken-down horses in large cities, or the beating of some balky car-horse. When we reflect that more money is spent for *beer* than for taxes, stamps, and even clothing, it is a matter of some surprise that the manufacture of spirits of all sorts does not attract the attention of humanitarians, and, indeed, that the Government does not give some little attention to what passes into the *constitutions* of its millions of citizens.

For a long time it was thought that the active alkaloid of the fishberry produced its effects like strychnia, but it has lately been noticed that it does not give rise to any exaltation of spinal irritability like that from large doses of tincture of nux vomica and of its alkaloid (strychnia), for the main effects of large doses of the berry were giddiness, with some loss of power over the lower extremities. Now we find a like feeling of giddiness and light-headedness from the action of Tanret's Pelletierene in a single dose, given for tænia. In thirty minutes after the dose had been swallowed, the patient had to lie down, and slept soundly for five hours. In cases known to have succumbed to the poisonous effects of the cocculus, there were found *cerebral congestion*, sweating, more or less strabismus, with exhaustion, followed by death.

We rarely resort to the use of the cocculus as a remedy, except in the form of ointment, either alone or in combination with some form of mercury, as a destroying agent for lice, and even in this mode of employing it, cases have been known where like poisonous effects to those of tobacco cataplasms to the raw scalp, and of snuff and tobacco leaf poultices to the chests of children in croup, have been observed. Certain it is that in cases of pediculus capitis, as well as in the smaller variety, or in that of the pubis, it is one of our best agents, and if mixed with one-third part unguentum hydrargyrum, we need have no fear but that every trace of the

pests will soon vanish. It is far more certain than the old ointment of lockspur, which was so common in the South before the "late unpleasantness," or with only one-third ung. hydrarg. need we have any dread of salivation.

Some years ago Planat reported sixteen (16) cases of cure, by this agent, of epilepsy, and claimed that, except in the worst cases, a cure by the cocculus indicus is always possible, if the treatment is carried out after his directions, and, indeed, it must be a medicine of great potency, if the plan he lays down could do any great harm.

Now this plan of treating epilepsy, if even supported by further and satisfactory trials, ought to eclipse the various bromide mixtures, for they not only generally fail to cure, but leave the patient not only *dazed*, but, in many instances, *fearfully* broken out with an acne, whose traces are not always ineffaceable. No longer than yesterday the writer met a lady from another State, who was travelling, with her fifth bottle of bromide mixture, from whose effects, she says, her shoulders were never free from a crop of large acnoid lumps. This bottle she obtains from New York each month, at the cost of $5.00. May it not occur to the reader as a possible good combination in epilepsy, to give half as much of the bromides as recommended by Hammond, Seguin and by Brown-Sequard, and add the cocculus, in proper form and proportion, with, say, enough of the solution of the arsenite of potash or of Pearson's solution, if you prefer? Of course, all this must be in the future, but if any better remedy can be found for epilepsy than the bromides, which do not cure, why, then, it is worth much pains to seek it out.

I have never known it used, but it has seemed to me, as the sulphide of calcium was the remedy for acne, and the bromides the remedies in epilepsy—that if we could combine the effects (benefits) of the calcium with the bromine, we might have a good agent in the bromide of calcium. Something like this has been used in the form of the compound elixir of the iodo-bromide of calcium, and in that way we know of the innocent nature of the bromide of calcium.

ARCHER ATKINSON, M. D.

Baltimore, Md., July, 15, 1887.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D,, Theological Seminary, Va.

Acetanilide (Anti-Febrine) in the Treatment of Phthisis.

Dr. Gallet-Lagoguey (in *La Tribune Medicale*, 5th June, 1887) says, according to Ch. Cauldwell, acetanilide is our best remedy for combatting the fever of phthisical patients, for he has obtained from the administration of 8 grain doses two to four times a day favorable and unhoped for results. In those patients who have only slight induration of one lung, acetanilide produces immediate and marked amelioration. There is a fall of temperature to the normal, diminution in the frequency, and augmentation in the strength of the pulse; cleaning off of the tongue; return of appetite; disappearance of dyspeptic symptoms, pains in the chest, and the nervous symptoms; increase in secretion of urine, and great general improvement. In cases of greater tuberculous infiltration with some points of softening, it held the temperature at normal, slowed the pulse, improved the appetite and digestion, and diminished the agitation and insomnia. In a third class of cases, where there are extensive lesions in both lungs, with indications of early fatal termination, the remedy yet produces great amelioration in lessening the hectic fever and calming agitation. The author declares, moreover, that acetanilide is free from all the objections of salicylic acid, antipyrine, thalline and resorcine.

Nasal Vertigo.

Dr. Joal (of Mont Dore) has just published under this title a communication which he made to the *Congres de Laryngologie et d'Otologie*, and of which the following is an analysis:

1. There exists a nasal vertigo, a veritable *vertigo a naso.*

2. It belongs to the group of reflex vertigoes, and should be classed with the gastric, laryngeal and uterine vertigoes.

3. Irritation of those branches of the trigeminus which ennervate the mucous membrane covering the turbinated bones and the septum is the cause of the vertigo and of other nasal neuroses.

4. The excitation of the trigeminus is transmitted through the spheno-palatine ganglion to vaso-motor nerves and gives rise to circumscribed cerebral anæmia and vertigo.

5. The affections which give rise to the vertigo are: The nasal congestions (as caused by odors, irritating vapors,

snuff, blooming plants); the acute coryzas; chronic catarrh, especially the hypertrophic form; the mucous polypi; post-nasal catarrh.

6. The vertigo is produced by very slight nasal affections.

7. The nasal reflexes are developed chiefly in persons with tendencies to arthritic troubles.

8. The vertigo may appear alone, or may be accompanied by other nervous phenomena, as, troubles of vision, muscæ volitantes, hemicrania, nausea, vomiting, great excitability, hypochondriasis, intelleetual sluggishness, nightmares, spasmodic cough, attacks of dyspnœa, increased secretions, weakness of the pulse, pallor of the face, and syncope.

9. To establish the diagnosis, it is necessary to examine the nasal fossæ of every individual suffering from vertigo.

10. The investigation of nasal vertigo will greatly diminish the number of cases of gouty, rheumatismal anæmia, congestive and neuropathic cerebro-cardiac vertigoes.

11. The vertigo ceases with the cure of the nasal disease which gives rise to it.

The Action of Calomel.

Nothnagel, who has been studying the diuretic action of calomel, already remarked by Jendrasik, was struck by increased flow of urine following its use in two patients who had taken digitalis, caffein and sodium salicylate without effect. He gave the calomel in 0. gr. 20 (3 grains) doses three or four times a day for three or four days. At the same time the patient took chlorate of potash to prevent salivation. Two or three days after the beginning of this treatment the quantity of urine increased to two, three, four and five litres a day. This continued for several days, but if the use of the remedy was discontinued the flow decreased to the original quantity. It is necessary to continue the use of the remedy until the dropsy disappears. In some cases the diuretic action of calomel is not immediately manifested, and one should not content himself with a single trial. To prevent the diarrhœa produced by the calomel, it is best to give it with opium. The calomel has no action on the heart or pulse, and its diuretic action is yet to be explained.

Nothnagel has also studied the action of calomel in typhoid fever. It is known that Weil has attributed to this substance an abortive influence in typhoid fever. This action is explained in two ways: Some say that the calomel is changed in the intestine into the bichloride and acts as a microbicide, while others hold that the calomel by virtue of its purgative action expels the bacilli and prevents their entrance into the

circulation. If this last opinion be correct, the same result should be obtained with any other purgative, and Nothnagel has made some experiments that seem to show that castor oil possesses absolutely the same abortive property as calomel in typhoid fever. (Sem. Méd.)—*La Practicien*, 20th June, 1887.

Comparative Strength of the Salts of Quinine.

M. Boymont communicates to the Société de Therapeutique the following table indicating the amount of quinine contained in equal quantities by weight of the salts of quinine, and also their relative solubility. The hydrate of quinine contains 35 parts per 100 of the alkaloid; the acetate, 84; the chlorohydrate, 81; the basic lactate, 78; the bromohydrate, 76; the basic valerianate, 76; the basic sulphate, 74; the sulphovinate, 71; the bisulphate, 59. While it takes 581 parts of water to dissolve one part of the basic sulphate, it only requires 21 parts to dissolve one part of the chlorohydrate, and 10 for one part of the lactate.

M. Dujardin-Beaumetz expressed the opinion that the chlorohydrate is undeniably superior to the sulphate, for it is one of the most stable of the quinine salts, is much more soluble than the sulphate, and contains more of the alkaloid. MM. Paul and Delpech agreed fully with M. Dujardin-Beaumetz, while M. Vigier added that the chlorohydrate was but little more expensive than the sulphate and nearly always more pure.—*La Practicien*, 6 June, 1887.

Treatment of Morphinomania by Nitroglycerine Associated with Sparteine.

La Tribune Médical, of 26th of June, 1887, publishes a communication of Dr. O. Jennings to the Société Médical de l'Elysée in which he gives the results of some further* investigation in the treatment of the morphine habit.

In case of victims of the morphine habit, deprivation of their usual dose causes suffering of a complex nature, consisting of cerebral and peripheral elements; each should be combatted by an appropriate remedy. The cerebral suffering, which arises from cerebral anæmia, is the most painful, and can be relieved by nitroglycerine. The peripheral suffering, arising from organic failing, is relieved by sparteine, which arouses the heart's action as does an injection of morphine, when the patients are in the state of want. Greater experience has convinced him that the effect of nitroglycerine is more satisfactory and lasting in those cases in which the psychic symptoms are more painful than those of the purely

* *Vide* this journal, Vol. XIV, No. 4, p. 301.

somatic nature. On the other hand, when there are indications of greater physical than mental suffering, the use of sparteine, which is a circulatory tonic, gives the best results. But, above all, he insists that in the simultaneous administration of the two remedies—the one by hypodermic injection, the other by the mouth—we possess a means of the first order in combatting the symptoms arising from the deprivation of morphine in their double modality.

Antitubercular Action of Iodoform.

The question as to the antitubercular value of iodoform having been of late raised, the following summary of a paper read by Dr. Bruns (of Tubingens), before the Congress of the Society of German Surgeons, is of interest and importance. It is well known that some claim for iodoform a distinct antitubercular action when used locally in cases of tubercular deposits, while others go so far as to deny for it any value at all. Dr. Bruns' paper is a valuable contribution to the literature of the subject. Our extract is from *Le Progrés Médical*, of the 21st of May, 1887.

Dr. Bruns states that he has treated 50 cases of cold tubercular abscess with injections of a 10 per cent. mixture of iodoform in glycerine and alcohol ($\overline{aa}$ equal parts), and the results obtained prove the value of the remedy. He aspirates the abscess and injects through the aspirator needle the iodoform mixture. This was never followed by reaction or poisoning. In some cases a single injection was sufficient to produce cure, but generally two or three were required at intervals of three or four weeks, the disease gradually lessening for several months until it disappeared. Of the 54 cases, 40 were cured. Some of those cured were very large abscesses, containing from 400 to 2,000 grammes of pus. These results accord with those of Milulicz, Verneuil and Billroth. These abscesses being of a tubercular nature, their cure by iodoform proves its antitubercular action. By its intimate contact with the walls of the abscess, the iodoform destroys the tuberculous tissue and stimulates normal granulations. In order to test the action of the iodoform on the tubercular bacilli, he opened, some time after the injection, several abscesses of a clearly tuberculous nature and extirpated their walls, which were subjected to microscopic examination. This examination showed an entire disappearance of the bacilli and replacement of tubercular tissue by healthy granulation-tissue.

Analyses, Selections, etc.

A Case of Enchondroma of the Ribs

Is reported in the *Transactions of the South Carolina Medcal Association*, 1887, by A. A. Moore, M. D., Camden, S. C., which we have had illustrated by a woodcut, which is of great interest.

Wesley W., aged 28, mulatto, married, applied for treatment about the last of June, 1884. At that time he had a very large tumor on the left side, extending from the sternum to the spine; and from nearly the top of the shoulder to the lower border of the ribs, on its dorsal aspect; and viewed laterally, from the top of the axilla to the lower border of the ribs. From sternum to spine it measured 36 inches; and from top to bottom on the back, 39 inches. It projected so much from the axilla as entirely to prevent the arm from falling naturally by the side, but kept it in a position of almost a right angle with the body. While its general contour was round and smooth, it was at the same time indistinctly nodulated. It was painless, and the skin covering it was of a natural color, except one or two purplish spots indicating a tendency to ulcerate. His pulse was 96 sitting, and from 80 to 90 lying. Axillary temperature 98¾°. His right arm measured 9½ inches in circumference below the deltoid, and his left arm, which was on the diseased side, 8½ inches at the same point. His height was 5 feet 4 inches, and weight 138 pounds.

His health had always been good, except an attack of bilious fever in 1880, and mumps in 1881. In March, 1881, while driving a one-horse wagon loaded with rails, he was knocked down and run over by the hind wheel of the wagon, while the horse was running away, having been struck just below the left shoulder blade. He was laid up three days from the bruise, soreness, etc. After that he was as well as usual, until the following September. He was then taken

with a dull, heavy pain in the left breast, which continued up to February, 1883, when he first discovered a small lump in the left side of his chest, about the size of a partridge egg. It grew until it attained the dimensions which I have given. As he suffered very little inconvenience, except from its weight and pressure, he continued to labor until a few weeks before he submitted his case to me. The idea of removing such a large tumor, even if I had been sure that there was no lesion of internal organs, was not entertained for a moment.

Believing, however, after careful examination, that it contained fluid, and that its removal would lessen its weight somewhat, and thus perhaps afford some temporary relief, I aspirated it on the back on July 3d, 1884, drawing off 4½ pints of fluid, of the color of stained honey, but a little thinner. Only a slight shrinkage followed, making the nodules a little more prominent. During the aspiration, the flow of the fluid would occasionally slacken, and by moving the point of the needle in different directions in the tumor, the flow would be again increased, showing that the cavity was multilocular. A short time afterwards, at my request, my friend, Dr. John W. Corbett, aspirated it again, drawing 3 pints of much thicker fluid. Up to that time, and until a few days before his death, his appetite was fair, and his digestive and other organs were apparently working well, and, therefore, no other treatment was deemed necessary. On August 4th, I was hastily summoned to see him, and found him in a dying condition, freely expectorating fluid of the same character as that we had drawn, and accompanied by loud gurgling at every respiration. He died in two or three hours.

A few hours afterwards, assisted by Dr. Corbett, I made a *post mortem* examination. Finding the tumor very fragile, we could not remove it entire, but only in fragments. As is the history of these neoplasms, we found that its structure varied, the larger part being cartilaginous, while the other portions were of a soft, gelatinous nature. Two of the ribs were consumed, from end to end, by erosion, two others were destroyed in the middle, and several had on them large incrustations of a calcareous nature. We also found large lumps of this matter imbedded in the lung. We made no examination of the other organs. The portions of the tumor which we could collect together weighed 27 pounds. With a large part which we could not preserve, and with the fluid which had been previously drawn, we estimated that the

whole mass intact would have weighed at least 55 or 60 pounds.

I have reported this case neither for its novelty nor rarity, but only on account of its remarkable size—which was fully one-half that of the body.

Malarial Hæmaturia

Is the title of the "Pittman Prize Essay of the Medical Society of North Carolina, 1887," by Dr. Julian M. Baker, of Tarboro, N. C., and is published in the *North Carolina Medical Journal*, July, 1887. From his brief historical allusions, he concludes that it is not a new disease, but its recognition as a distinct type is modern. He then gives from his experience the records of four typical cases—two of which died—a mortality of 50 per cent. The disease has a definite and settled pathology, characterized by profound lesions of the kidneys and alterations in and destruction of the red-blood globules—the destruction taking place in the liver and spleen. The rod-like microbes found in the liver and spleen have a causative relation. But the causative germ itself is almost in the bounds of the visible, and is a living pathogenic organism. Dr. Baker thinks it more probable that malarial hæmaturia, besides presenting the general pathological characteristics of malaria, presents others not seen in normal malarial diseases; and if malaria exists at all as a causative element, there is another of an entirely different nature. *As to treatment*, he begins with a brisk cathartic composed of podophyllin, aloin, and extract of belladonna, or else calomel alone, or calomel and rhubarb. If everything is rejected by the stomach, give enema of castor oil and warm water. Give quinia by stomach if possible; otherwise hypodermically—say five grains of the bisulphate in solution every three or four hours until twenty-five or thirty grains are given. Nourish the patient—if necessary by hypodermics of beef-juices, milk, cod-liver oil, etc. The remedy above all others to be relied on to relieve the sick stomach is hydrochlorate of cocaine. Digitalis should be given as soon as possible, to sustain the weak heart and to serve as a diuretic, and may be combined with aromatic spirits of ammonia or alkaline diuretics. Rub turpentine repeatedly over the lumbar region to keep the kidneys active. No internal remedy is equal to calomel, ℈j or ʒss, for this purpose. As soon as convalescence begins, give tonics. Ten or fifteen minims of a four per cent. solution of cocaine not only often stops the sick stomach, but stimulates the kidneys and gives increased force to the heart's action.

Case of Suprapubic Lithotomy.

Dr. J. T. Field, of Fort Worth, Texas, reports the case (*Tex. Cour. Rec. Med.*, July, 1887) of a man, aged 33, who had the expression of long suffering from cystitis, and whose symptoms were tenesmus, strangury, with mucus, blood and pus in his urine, as also an excessive amount of urea and ten per cent. of albumen. Every day or two he would have urethral fever—temperature running up to 104° or 105°. Preparatory treatment of quinia, muriated tincture of iron, etc., and anodyne suppositories did but little good. Assisted by Drs. W. P. Burts, R. C. Volker, M. C. Farrar (who administered chloroform), and W. A. Duringer, he performed the high operation of suprapubic lithotomy, September 10th, 1886. A small beef-bladder, filled with water by Davidson's syringe, was the substitute for usual rubber bag to be inflated in the rectum. The bladder was then injected full of an antiseptic fluid, and the penis was ligated with a piece of rubber to retain the fluid. The incision was made through the linea alba, and then the dissection down to the bladder completed with the finger nail. The bladder was then opened. The index finger was introduced, and one stone was easily dislodged and removed. But another stone was so sacculated near the trigone that it was very difficult to dislodge, and most probably could not have been removed at all by a urethral or a perineal operation. Uric acid deposits thickly encrusted the posterior walls of the bladder, and these deposits were thoroughly washed out with the antiseptic fluid. A Nélaton's catheter was introduced per urethram and secured for twenty-four hours; a rubber tube was left in the wound to prevent urine from getting into the cellular tissue. Two stitches were taken in upper part of wound; carbolyzed lint laid over the wound, and the patient was put to bed. The peritoneum was not touched nor seen during the operation. Although he had considerable fever when the operation was begun, he reacted promptly. The tube came out of the wound on the second day, and was not replaced. The calculus first removed was about the size of a peach, and was mostly uric acid; the other was of the "rough mulberry" variety, and about the shape and size of a pigeon egg. The patient progressed favorably until fourteenth day, when he was attacked with dengue, which lasted eighteen or twenty days. The wounds, which had nearly healed, reopened. This fact of the reopening of wounds by dengue has been often noted by others. Recovery occupied over two months. He now is perfectly well, and has grown so

fleshy that he cannot wear his old clothes. The suprapubic operation is a much simpler and safer one, and is less painful, than the perineal. This is probably the first suprapubic lithotomy ever performed in Texas. Dr. Johns, of San Antonio, performed the second suprapubic operation in Texas —also successful.

Substitute for Iodoform—Bismuth Sub- or Oxy-Iodide.

Dr. Chas. Chassaignac, of New Orleans, says (*N. O. Med. and Surg. Jour.*, July, 1887) that some ten years ago Dr. A. S. Reynolds used the oxy-iodide or sub-iodide of bismuth as an efficient substitute for iodoform, but it was not generally adopted because of its high cost. Dr. E. Matlock, of Philadelphia, has lately been using it extensively, and is highly pleased with it. The sub-iodide of bismuth is bright-red, impalpable powder when well pulverized, almost odorless and tasteless, and is insoluble in water, alcohol, ether, or chloroform. It does not stain, and is easily washed off. It may be made thus:

℞. Bismuth subnitrate.....ʒiiss, gr.. xxiv
Nitric acid..... ..f. ℥iij
Hot water.....f. ℥xij—M.
℞. Potassium iodide.....ʒxj, gr. iij
Hot water..... .f. ℥xxviij—M.

Dissolve the bismuth in the acid solution in a porcelain capsule with the aid of heat; add boiling water, ℥xij in small portions at a time, stirring after each addition. Then pour solution in the potassium iodide solution, agitating after each addition. Continue agitation until decomposition is complete. Filter at once. Wash precipitate with warm water.

When subiodide of bismuth is dusted over a raw surface, it produces a thin silvery film, somewhat like that of lunar caustic, but more faint. It imparts no stinging, but is anæsthetic like iodoform. It has a marked healing effect upon chancres and chancroids. It is also an antiseptic wound dressing, diminishes the secretion of pus, and hastens cicatrization. It is a good deodorizer. Wounds dressed with it may remain a week or so without touching or odor. Dr. C. refers to cases in which he has used it for dressing of stumps of amputated limbs and other surfaces, in which it far surpasses iodoform, powdered cinchona, dustings of bismuth, etc. He has not used it internally, but for the past two months or more in Charity Hospital, New Orleans, and in private practice, it has been made the substitute of all the former powder dressings, etc. The objection of high price

has also been removed, as it can be made so as not to cost over $3 or $3.50, while iodoform sells for $5 a pound.

Sycosis.

Dr. Lucian F. Salomon, of New Orleans, La., describes sycosis (*N. O. Med. and Surg. Jour.*, July, 1887) as a non-contagious follicular or perifollicular inflammation of the hairy portion of the face, developing pustules and nodules, and by extending to deeper tissues produces abscesses. The intervening skin inflames by extension, causing infiltration and a roughened appearance. It is *diagnosed* from sycosis parasitica or tinea tonsurans, by the fact that under the microscope the vegetable fungus (tricophyton tonsurans) of the latter disease will be found attached to the roots of the hairs. Besides, in the parasitic disease the hairs are lustreless and loose in their follicles, often fractured or easily broken, readily extracted without pain, and frequently fall out; pustules are generally isolated in the otherwise healthy skin, except in the later stages, when kerion occurs. In true sycosis, the hair, on being withdrawn, is painful, and often brings its sheath with it, surrounded by a small pus sac. Eczema is not limited to the hair follicles, nor confined strictly to the hairy portion, and an exudation covers the surface, and is attended with less infiltration and thickening of the skin. In treatment, repeated shaving *must* be insisted on. The irritation maintained by motion of the hairs when not shaved every day, or every other day, aggravates the disease. To the shaven surface, apply twice daily for two days ointment of white precipitate of one-half U. S. Phar. strength—having previously bathed the part with warm water. This removes encrustations, and sets up a healthy action of the skin. If the skin is actively inflamed, bland lotions of oxide of zinc and calamine, or an ointment of oleate of zinc will be good. After this, apply chrysophanic acid. ten to fifteen grains to the ointment base, or the collodion solution of the same strength applied with a brush only to the diseased surface. This will remain on the skin from two to four days. When it begins to peel off, wash with warm water, dry well, and apply ammoniated mercurial ointment for several days, and then re-apply the chrysophanic collodion, and continue treatment as before. As a rule, only three or four applications are required. After getting the disease under control, then apply a mildly stimulating ointment, preferably of red oxide of mercury, gr. xv to xx, to simple cerate or lanolin, ℥j. Continue even after all trace

of disease is gone, and the shaving should be kept up for a year. Internal treatment is not needed, except to combat an intercurrent affection.

Treatment of Wounds of Large Surgical Veins.

Dr. Edmund Souchon, of New Orleans, means (*N. O. Med. and Surg. Jour.*, July, 1887) the large veins upon which the surgeon may operate with some chance of success, such as the internal jugular, subclavian, axillary, femoral, popliteal, etc. The paper allows of but slight condensation, as it is itself a condensation of the only two good articles he could find on the subject—one by Dr. S. W. Gross (*Amer. Jour. Med. Sci.*, Jan. and Ap'l, 1867) and one by Dr. Lewis S. Pilcher (*Annals of Surg.*, Jan., 1886). This paper of Dr. Souchon systematizes "Remarks Applicable to"

I. *Almost all of above Veins.*

1. When removing a tumor, a vein is to be wounded, ligate it beforehand, if possible, with a double ligature. Before severing pedicle, ligate, or place ligature above and below it, and cut between ligatures.

2. When chloroform has been used, hæmorrhage may not take place until the patient has recovered.

3. Spontaneous union of lips of wound may occur.

4. When large vein is wounded, apply the fingers to the wound at once to stop hæmorrhage and prevent entrance of air; then place two ligatures.

5. If impossible to ligate, compress, but if compression is ineffective, ligate corresponding artery of limb to stop bleeding.

6. Lateral ligation is unreliable, and should never be used, although some successful cases are recorded.

7. When vein is ligated, none of the tunics are divided, but internal surface is thrown into folds, which become adherent; distal side of vessel presents a blood-clot, which becomes adherent to walls of vein.

8. Ligature of veins is ancient (Celsus); but Dr. Simson, of Scotland, first ligated internal jugular.

9. When coats of vessel are healthy and blood is normal, ligature is never starting point of pyæmia. But cases are recorded where in operating for aneurism the accompanying vein has been transfixed by the needle, ligature then applied and phlebitis followed.

10. Dangers from ligating large vein are œdema, dropsical effusions, gangrene, apoplexy, softening of brain, and secondary hæmorrhage, about time of separation of thread. Average time for separation of ligature is 13th day.

11. Compress only when ligation is impossible. Digital compression should be used at once, to prevent introduction of air and stop hæmorrhage. As a permanent measure, it has been successful twice, after 48 hours in one case, and 72 in the other.

Plug by antiseptic sponges. A small piece is introduced first, then larger pieces. Remove them at expiration of 60 hours or 3 days, if loose, as wound of vein is then usually closed, or blocked by coagulum.

In mediate compression, edges of external wound having been approximated by few points of the interrupted suture, layers of iodoform-gauze are to be piled upon it and retained by roller or adhesive strips. If opening in vein be small and not gaping, moderate pressure must be exercised, to afford light support to walls of the vessel and avoid obliteration of its cavity. When pressure required is great, compression is painful, and interferes with respiration and deglutition. Secondary hæmorrhages are frequent enough. Instrumental compression, when applicable, is preferable.

12. In uncontrollable hæmorrhage from internal jugular, subclavian, axillary and femoral veins, ligate corresponding artery to stop the bleeding. In case of jugular vein, this is useless, on account of circle of Willis. Ligate below largest collateral (*i. e.*, subscapular or deep femoral), lest gangrene follow from arterial ligation itself.

II. *Internal Jugular Vein.*

1. Causes of wounds of jugular are: extirpation of tumors; suicidal wounds; gunshot wound; stabs; ligation of carotid artery.

2. Where from obliteration of vein there was no hæmorrhage, a piece of vein has been removed with tumor.

3. Division of internal jugular vein in inferior third is more apt to permit introduction of air, because of adhesion there of walls of vein to fascia; hæmorrhage is most copious from reflux bleeding from the cardiac end during natural expiration, sneezing, crying, coughing. Division of vein in upper third is less frequently followed by introduction of air; hæmorrhage ensues from the distal end—little or no blood flowing from proximal end. Division near base of skull is followed by fatal hæmorrhage—no recovery being reported.

4. Wounds of internal jugular in old people cause greater hæmorrhage, because veins are larger.

5. Causes of death in wounds of internal jugular were: introduction of air, primary hæmorrhage, pyæmia, etc.

Symptoms of introduction of air into veins are wheezing sound, syncope, tetanic spasms, and opisthotonos. Condition most favorable for introduction of air is canalization of vessel from inflammatory thickening of its walls, preventing collapse when divided. When vein is imbedded or firmly attached to a tumor, the accident has usually followed division of pedicle; to prevent this, ligature should be applied to pedicle before severing it.

After introduction of air, death occurred almost instantaneously in two or three cases; in another, in 3½ hours; and in a fourth, after the lapse of 7 days.

Gunshot wound of internal jugular is apt to be followed by secondary hæmorrhage, pyæmia, and death. Secondary hæmorrhage in gunshot wounds occurred on the 4th, 8th, 10th and 15th day.

6. Mortality of cases not subjected to treatment is 100 per cent. from primary hæmorrhage, introduction of air, pyæmia, and secondary hæmorrhage (internal jugular).

7. Secondary hæmorrhage followed in 12.2 per cent., of which 80 per cent. were fatal from use of lateral ligature.

8. Mortality after ligature of 40 cases is but 10 per cent. (internal jugular). Mortality of cases treated by compression is 12.5 per cent.

9. On account of collateral circulation through lateral sinuses mainly, ligation of internal jugular is not attended with serious results as regards the brain.

10. Deaths following ligation have been due to secondary hæmorrhage about the time of separation of thread.

11. When carotid artery is wounded at same time as vein, case may recover, but with the formation of an arterio-venous aneurism.

III. *Subclavian, Axillary, Femoral and Popliteal Veins.*

1. To prevent gangrene of limb following ligature of large vein of that limb, ligate corresponding artery, thereby diminishing the supply of blood to the limb; but ligate below largest collateral subscapular and circumflex or deep femoral. The artery should be ligated only when limb begins to show threatening symptoms—*i. e.*, becomes swollen and blue.

2. Do not ligate artery when a tumor has been pressing upon main vein so as to develop collateral circulation. This applies particularly to subclavian and femoral veins; it does not apply so well to axillary vein, because tumor of the axillary will grow from the vein for a while, and will only compress it when very large.

3. Collateral venous circulation of upper extremity is more

developed than that of the lower; for this reason the ligation of the artery is not so often called for.

4. When subclavian vein is ligated, prognosis is worse than when axillary vein is ligated in axilla, because cephalic vein and its branch to subclavian are shut off.

5. When axillary vein is ligated above subscapular vein, prognosis is worse for same reasons.

6. If femoral vein is ligated above internal saphenous opening, prognosis is worse, as this is a collateral branch.

7. When popliteal vein is ligated above opening of external saphenous, prognosis is worse for same reason.

8. When, during operation, numerous smaller collateral veins have been divided, prognosis is less favorable.

9. If, after amputating varicose limb, venous hæmorrhage resists elevation of stump and compression of stump, ligate the femoral artery below deep femoral.

Superficial Hairs Permanently Removed by Electrolysis.

Dr. I N. Bloom, of Louisville, Ky., read a paper on this subject before the late meeting of the Kentucky State Medical Society. After giving due credits (*Southwest. Med Gaz.*, July, 1887) to Mitchel and Hardaway, he directs the patient with hypertrichosis (pigmented hairs on parts where they ought not to grow—say, of the female face) to sit in a convenient chair, facing a good light, with a suitable galvanic battery on a table at her side. Place the sponge-covered positive electrode in her lap. The needle attached to the negative pole is inserted as nearly as possible into the hair follicle. The circuit is then closed by the patient grasping the positive sponge electrode in her lap, and, after a sufficient time, the positive pole is laid aside, and the needle withdrawn. The hair-bulb is permanently destroyed, leaving no scar. As to the *kind of needle*, a cambric needle of about No. 13, or a gold needle as fine as is obtainable, or the finest jeweller's broach may be used; but now Hardaway's iridium-platinum needles are used by preference. The *depth of insertion* of the needle should be as nearly as possible to reach the bottom of the hair follicle. With experience, we learn how deep to go, and feel the resistance at the bottom of the hair follicle. As to *strength of current of electricity*, a current stronger than 7 to 12 milliamperes causes such pain as to be practically unendurable. A current of about 3 milliamperes, with the needle-point sufficiently close to the hair papilla, suffices for the destruction of the coarsest hair, by allowing the current to pass from 20 *to* 30 *seconds of time.*

Whatever the number of cells used, regulate the supply of current by the rheostats, and measure the quantity by the galvanometer. Ordinarily one to two milliamperes is enough.

Cocaine—Its Advantages and Uses.

Dr. Andrew Sargent (*Southwest. Med. Gaz.*, July, 1887), in a paper read before the recent session of the Kentucky State Medical Society, reviews the history of cocaine, and then remarks that, for ordinary operations upon mucous surfaces, a two-per-cent. solution is generally of sufficient strength to secure anæsthesia. Some, however, use solutions of from four per cent. to twenty per cent.; but increase of the anæsthesia is not proportioned to the increase of the percentage solution. A two-per-cent. solution placed on a mucous membrane, produces, in from five to ten minutes, numbness and loss of sensibility, which lasts from 30 to 60 minutes, and frequently for two hours. The anæsthetic action of cocaine is not exhausted by repetition; a future application is as successful as the first. It does not act on the undenuded skin, but acts promptly on surfaces deprived of cuticle. Hence it is of great benefit for burns or scalds of the second and third degrees. Hypodermically, 15 to 30 minims of two-per-cent solution produces so much anæsthesia in the surrounding tissues that many minor surgical operations may be painlessly performed. It is of greatest benefit where simple incision of the skin is the chief element of pain—such as opening superficial abscesses, incising felons, extirpating lupus, removing small tumors, hare-lip operation, pleurotomy, or even tracheotomy during its first steps, etc. In all such cases, the anæsthesia of cocaine is far superior to that produced by cold, menthol, or carbolic acid. Always place the patient in a recumbent position, to avoid vertigo, which sometimes ensues after hypodermics of cocaine, and wait ten minutes at least before proceeding to operate. Inject, at both extremities of the line which you wish your lancet to traverse, a syringeful of a two-per-cent. solution, gradually discharged as the needle penetrates deeper and deeper. For removing foreign bodies from the cornea, it is far superior to chloroform or ether. The buccal and pharyngeal mucous membranes are readily anæsthetized by cocaine. In tubercular laryngitis, applied to the throat a few minutes before a meal, it relieves the pain of swallowing sufficiently to make eating painless. Cleft palate and uvula operations are rendered painless by its use, and laryngological examinations are made easy. Amygdalotomy is painless

after painting the throat and an injection of cocaine directly into the tonsil. But it is of no service in toothache or for the extraction of teeth. Painless galvano-cautery excision of epitheliomatous tongue has been done after injecting one grain of cocaine, dissolved in 20 minims of water, into the substance of the tongue beyond the line of excision. It is valuable in spasmodic vomiting—taken internally. Its special reputation is gained by its good in hay asthma and coryza. Half a grain per orem shortens the paroxysms of angina pectoris, and taken three times daily, prevents their return. Before dilating the sphincter for anal fissure, inject cocaine at two or three points near the anal margin, or apply a four-per-cent ointment. By its use, piles may be ligated or excised. Suppositories of cocaine are palliative of painful hæmorrhoids. If we apply forceps before injecting the preputial tissues with cocaine, we can remove adult phimosis with scarcely a twinge of pain; but the skin and mucous membrane so rapidly become œdematous, after injecting cocaine, that it is difficult sometimes to approximate the skin and mucous membrane. In amputation of the digits, in circumcisions, etc., immediately after injecting the cocaine, apply a tourniquet or bandage to prevent the circulation from carrying the drug away from the part. For a varicocele operation, inject a grain of cocaine just beneath the skin where the incision is to be made. In cauterizing venereal and other ulcers, first anæsthetize the parts by cocaine applications. In operating upon the urethral mucous membrane, cocaine injections are excellent, and especially should it be used before excising urethral caruncle. Pruritus vulvæ is relieved by cocaine applications. A few swabblings with a solution of cocaine have cured vaginismus. Its local use is said to ease the pains of parturition. Cracked nipples may be made bearable to the nursing mother by bathing them in a solution of cocaine before nursing, and used as an ointment, will assist in curing.

Necessity of Examining Urine in Practice.

Dr. James Ware, of Marksville, La., is impressed with the necessity of examining urine as a means of diagnosis (*N. O. Med. and Surg. Jour.*, July, 1887), and mentions a number of instances that have come under his observation of the great benefit he has obtained, both from a diagnostic and therapeutic standpoint, from urinary examinations. As Graves wished it written as his epitaph, "He fed fevers," so he wishes his epitaph to be, "Dr. Ware—He examined the urine."

Four Cases of Recovery from Penetrating Abdominal Wounds, Injuring Viscera.

Dr. J. W. Dupree, of Baton Rouge, La., reports these cases (*N. O. Med. and Surg. Jour.*, July, 1887). Case I., man, stabbed with dirk-knife, transfixing small intestine at two points, making four wounds of from a quarter to one inch each. Bowels protruded from external abdominal wounds which were larger, and were besmeared with blood, dirt and fœcal matter. Patient extremely collapsed, and hence little hæmorrhage. This was in 1870. Assisted by Dr. T. J. Buffington, he sewed up the wounds in the bowels with sutures about two lines apart at once, and returned them into the abdomen. Gross, Travers, and others had then demonstrated that sutured intestines in animals would recover. Each suture included about a half line of all the tunics, not excepting the mucous. Sutures were secured with double knot, and cut off closely. Of course the protruded bowels were cleansed with luke-warm water before returning them. External wounds were closed by a single set of interrupted sutures. Applied cold compresses; opium for some days to relieve pain and keep the peritonitis within bounds. Diet fluid. Urine drawn off twice daily. Bowels moved spontaneously on twelfth day. Rapid recovery. *Case II.* In 1872, man, wounded by 32 calibre conoidal ball, 3½ inches above umbilicus and 4½ inches to right of median line, and emerged on right of spinal column, near last lumbar. Profound shock symptoms present. This was before surgical laparotomy had been advocated. To obtain drainage, the wound of exit was kept dependent by continued dorsal decubitus; inflammation was kept in bounds by cold applications and opium, which was used until convalescence was far advanced. It also arrested peristaltic action. Only liquid food. Urine drawn off as required; and flatus was removed by rectal tube. Recovery in about two months, with natural fœcal discharges and large quantities of pus per rectum. Fœcal discharges came through orifice of exit of the ball soon after the wounding. Ingesta appeared often at wound of entrance. *Case III.* In 1873, man, wounded with pistol ball, entering 3 inches above umbilicus, and 1½ to right of median line. Very decided shock. Intestinal gas, etc., did not escape through the wound, and it is only surmised that the bowel was penetrated in this case by direction of wound as explored gently with the probe. Opium, fluid diet, etc. Natural bowel action on 10th day. Good recovery. *Case IV.* In 1884, man, pistol shot wound

24 hours before in right iliac region. Great pain, high fever, restless, great nausea, and hiccough; abdomen tender and tympanitic; wound discharging fæcal matter. Under opium, drainage position through wound, fluid diet, etc., he made rapid recovery.

Fatal Hæmorrhage from Tooth Extraction. [Cocaine aud Opium Poisoning.]

C. Edmunds Kells, Jr., D. D. S., New Orleans, reports (*N. O. Med. and Surg. Jour.*, July, 1887), a case of fatal hæmorrhage from gums some eight hours after extraction of fourteen teeth. It does not appear that during all this time as much as ten or twelve ounces of blood were lost, though no estimate is given by the Reporter. Seven and a half minims of a four per cent. solution of cocaine were injected in gums about 11.30 A. M. Seven minutes later, ten minims more were injected. This was followed at once by "local applications of a perhaps 50 per cent. solution of the same drug to the gums." Extraction was begun 20 minutes later. At once, patient had spasmodic contractions of muscles of body and face, which were so violent as to prevent application of forceps, except with difficulty, but at length ten teeth and four roots were extracted. His restlessness continued; injected 15 minims camphor water, which seemed to quiet him; amyl nitrite was also inhaled. Hæmorrhage ceased; a toddy was given and patient discharged about 1 P. M. About 3 30 P. M., the dentist was sent for to stop hæmorrhage [which had again begun from the sockets.] Patient was very excitedly talking, walking up and down the room, spitting blood in *very large* quantities. Injected 15 minims camphor solution in gums. As he would not sit down nor stop sucking out pledgets put in the sockets, plugging failed. At 4 o'clock, his physician tried plugging, but failed for same reason as above. Iron and alum mouth wash failed, until it was made ice cold. Attempt to inject morphine, gr. $\frac{1}{8}$ to $\frac{3}{16}$ths was only partially successful, because of patient's constant movements, but at last became quiet and laid down. Restlessness returned in a short time, and a quarter grain morphine was injected subcutaneously, "after which he quieted, immediately becoming very pale, although his pulse felt 'full and strong.'" At 7 P. M., he was quietly lying on sofa. A few minutes later his physician was recalled and found him breathing once a minute. Once under electric current, breathing returned to 13 per minute, but then it fell back until it finally ceased at 1 A. M.

Secondary Syphilis of Middle Ear—Unilateral Facial Paralysis.

Dr. S. Latimer Phillips, of Savannah, Ga., reports (*South. Med. Rec.*, July, 1887), a case to illustrate that sudden deafness in syphilis has been wrongly ascribed to lesion of internal ear when a more thorough examination would have found the true cause to be some change in the middle ear or tympanic cavity. Cases of syphilitic deafness, due to change in the middle ear are characterized by suddenness and profundity of the hardness of hearing. Shortly after the deafness came on in the case he reports, paralysis of one side of face occurred. He improved greatly and was still improving on treatment of potassium iodide and mercury when patient left, and has not been under his observation since. The disease in this case was in tympanic cavities.

Amyloid Kidney Degeneration—Endo- and Pericardial Murmurs.

Dr. James Tyson, of Philadelphia, in a clinical lecture (*South. Med. Rec.*, July, 1887), says when we have waxy casts in the urine we are sure we have a chronic kidney disease. In the case in hand, the woman has had syphilis, and we find albumen and hyaline casts, and the liver and spleen are very much enlarged. The liver and spleen are almost constantly enlarged in splenic amyloid degeneration. Chronic suppurative disease of any kind is likely to cause this form of degeneration; thus hip joint disease frequently causes amyloid kidney. The diagnosis in this case being *amyloid degeneration of kidneys, spleen and liver*, the treatment must be directed to the disease that caused it. In this case it is syphilis, and iodide of potassium is doing good. Let her continue it. In deciding upon improvement it is safer to rely on dimunition in size of liver and spleen than upon the lessening of albumen in urine, which may vary from incidental causes. Amyloid disease is never idiopathic, but must have a definite cause. It is never produced by cold, worry, overwork, etc.

His *Case II.* is to *diagnose extra- and intra-cardial murmurs. Peri*-cardial murmurs may exist one day and be gone the next—they disappear rapidly. *Endo*-cardial murmurs are constant. As a rule, *peri*-cardial murmurs are not so rough as endo-cardial. Fremitus is much more common in *peri*-cardial. If there be *peri-cardial effusion* indicated by increased area of dullness, the leaning is to pericarditis. In true hypertrophy, there will be a strong impulse; but a weak impulse in *peri*-cardial effusion. In the latter, there is a

sudden change from dullness to clearness; in the former, a gradual shading off. If dullness disappears on full inspiration, it inclines to dilated heart, as there is no such disappearance with dropsy of heart. To distinguish the friction sound of *pleurisy* from that of *pericarditis*, hold breath; it will then not be heard in pleurisy. The friction sounds are more superficial in *peri-* than in *endo*-carditis. Respiration is embarrassed in both, but less marked in *peri*-carditis. Pulse is regular but frequent in acute *endo*-carditis; but irregular in *peri*-carditis, but then eliminate emotional causes of irregular pulse. As to treatment of *peri*-carditis, apply good, big blisters, and give digitalis, supporting treating and special remedies to remove cause, such as anti-rheumatics.

Cholera Infantum.

Dr. James B. Baird, of Atlanta, Ga., defines the term (*Atlanta Med. and Surg. Jour.*, July, 1887), as "acute gastro-intestinal catarrh in young children, characterized by large, watery stools, profuse vomiting, high temperatures, great prostration and rapid wasting," but applies it to the widest range of cases generally styled cholera infantum. Infancy, hot weather, imprudent feeding, and bad hygienic surroundings are the causes. It is pre-eminently an American disease, although it does occur to some extent in Europe. The morbid anatomy is variable. As to treatment, the mother's milk is of first importance. The best substitute is milk of cows fed on bran, meal and hay. This milk should be diluted to suit, not the age, but the development and digestive strength of the child. "The upper half only from double the amount of milk required should be used. From this portion the quantity needed for a single meal should be dipped up after the milk has stood for three or four hours—in warm weather, on ice, or immersed in cool water—in order that sufficient cream may be procured to compensate for the addition of water." Add a little white sugar to compensate for dilution. Then immerse the vessel containing it in hot water for a few moments, and give it out of a nursing bottle. When the dejections contain curd-like masses, further dilution is required; occasionally a little lime water should be added. Condensed milk is not trustworthy. It is well to peptonize the cow's milk. Starchy foods are harmful. The tranquilizing effect of warm or tepid baths should not be overlooked. Cold bath is commended in excessive heat, by immersing the child in water at 100° and gradually reducing it to 80° or even 70°. Continue the cold by apply-

ing cold cloth to head for about ten minutes. Repeat if desired two or three times a day; but promptly abandon this plan if depression follows. Salt may be added to the bath. Enemata of salt water may be given to relieve tenesmus. The room should be large, well ventilated and kept quiet. Change from city to country is often promptly curative. Pepsine and bismuth are the best medicines. Opium may be indispensable as a temporary assistant. If nitrate of silver injections are resorted to, first bathe the anus and adjacent parts with salt water to avoid distressing tenesmus. Chloral is valuable to procure sleep, etc. Castor oil and possibly small doses of calomel are indicated in some cases. The antiseptic method is becoming fashionable. Creosote ($\frac{1}{8}$ to $\frac{1}{6}$ drop) in mucilage after vomiting, sometimes acts like magic. Quinine heroically to kill the germs of disease is said to be valuable, but he does not approve of abusing so exc llent a drug. Brandy is important to ward off asthena. Counter-irritants are to be used as required. A great number of other drugs may be serviceable according to indications.

Successful Cæsarean Section of a Cow.

Dr. C. Hamilton, of Ringgold, Ga., reports the case (*South. Med. Rec.*, July, 1887). Beginning incision at edge of mammary gland, he cut up, a little to right of median line, some six or seven inches, and then incised the uterus as small as would permit the calf to be extracted. He then ruptured the membranes and delivered the calf, which, in a few minutes was up and walking about. He sutured the cut in the uterus with cat gut. After closing external wounds, the cow got up and let her calf suck. During extraction, the pains were as regular as in natural labor. The cow made a good recovery. No anæsthetic was used, and the cow struggled but little. [This same report appears in *Southern Practitioner*, July, 1887.]

Case of Maternal Impressions.

Dr. S. W. Stiles reports the case (*South. Med. Rec.*, July, 1887), of a young lady, æt 18, whose mother during pregnancy was frightened two months before labor by a drunken man. When the child was born she had all the movements of a drunken man, and these have continued to the present time. She reels as she walks, and her head has a rotary motion from side to side; yet she enjoys good health and cooks and washes for the family. [Who will report the next case?]

Alcoholic Liquors in the Practice of Medicine

Is the title of a paper by Dr. Eugene Foster, of Augusta, Ga., (*Atlanta Med. and Surg. Jour.*, July, 1887), in which he proves his points that alcoholic liquors are serviceable in the practice of medicine, and so attested by hundreds of eminent authorities; and, that this being proven, it was injuriously and dangerously made illegal by the Georgia Legislature to allow of the manufacture or sale of alcoholics in the State of Georgia. The paper is to be continued in the August and September numbers of the Atlanta Journal, and is to appear in full as it was prepared for, and read before the Georgia Medical Association, 1887.

Successful Ovariotomy During Gestation.

Dr. E. J. Beall, of Fort Worth, Texas, reports (*Tex. Cour. Rec. Med.*, July, 1887) the case of Mrs. H., married two years. No children. A tumor began to develop in her abdomen a year before marriage, which was tapped eight months ago, but afterwards rapidly enlarged again. Three months pregnancy was also clearly diagnosed. Assisted by Drs. Walker and Pennington, the patient being under ether, a thoroughly aseptic ovariotomy was performed, without injury to the womb or its contents. The patient recovered without any untoward event. Nothing retarded normal pregnancy up to nearly the fourth-and-a-half month, when this report was made.

Cholera of 1849 in Concordia Parish, La.

Dr. D. R. Fox, of Jesuits' Bend, La., says (*N. O. Med. and Surg. Jour.*, July, 1887) that the cholera in 1849 was imported from Harve into New York, December 1st, 1848. Another ship, which left Harve November 3d, brought the disease to New Orleans, December 7th. Cases rapidly multiplied in that city and extended up to Memphis, and were very fatal. The weather was very hot and favorable for the rapid spread of the epidemic. The treatment he then adopted, after trial of the various plans suggested, was to give five-grain doses of calomel with five drops of laudanum every five minutes, and keeping the patient in the horizontal position, as many faint and die in the efforts to rise up to have bowel evacuations. Stimulants and other remedies were used as required. Good judgment is required to know when to desist or lessen the dose of opium. Chloroform was not known in practice then—the internal administration of which is very valuable. Capsicum, aromatic spirits of

ammonia, Hoffman's anodyne, etc., all have their appropriate uses; but it is to the treatment by calomel in the manner described that Dr. Fox attributes his great success.

Hepatic Stimulants and Cholagogues.

An excellent paper on this subject, by Dr. George Gillett Thomas, of Wilmington, N. C., one of the Editors of the *North Carolina Medical Journal*, appears as the leader in the July number, 1887, of that journal. We gave an approved synopsis of it in our May number, 1887, pages 135–6; and hence we need not reprint it here.

Good Old Therapeutics.

Dr. J. W. Carhart, of Lampasas, Texas, very forcibly and rationally advocates (*Tex. Cour. Rec. Med.*, July, 1887) "Morality as a Therapeutic Agent"; and he then advocates "Hygiene and Therapeutics as Factors in Moral Problems." Preachers and moralists should understand that many moral obliquities are the result of physical disorders, heredity, etc.

Specialism In Medicine

Was the title of the Address of the President of the Kentucky State Medical Society, Dr. W. H. Wathen, of Louisville, Ky., delivered June 16th, and reported in *South Westerd Medical Gazette*, July, 1887. He well points out the importance of a thorough study of general medicine before adopting a specialty. Hence he condemns the graduation of a young student as a specialist. "No specialist should be encouraged who has not gradually fallen into a particular line of practice because of the development of some marked aptitude for the treatment of a disease or a limited number of diseases."

Compound Spirits of Ether.

Dr. Odo Betz, of Heilbrown, Germany, under that indefinite heading of "Obstetric Notes," brings out (*Daniel's Tex. Med. Jour.*, July, 1887) the value of applying compound spirits of ether to the nasal mucous membranes as an excellent stimulant and antispasmodic. His father once saved a case of spasm of the glottis by pouring compound spirits of ether into the nostrils. In the case under the writer's care—asphyxiated child at birth—he instilled a few drops into the nose, and applied some over the cardiac region, and continued Schulze's method of swinging the child, and breath ing began after 45 minutes and soon became regular.

Phenomenal Case of Hysteria.

Dr. F. A. Schmitt, of Schulenburg, Texas, (*Daniel's Texas Med. Jour.*, July, 1887,) says hysteria is not always connected with the womb He has seen it in man. Heredity is a cause. But childless wives, widows and old maids are the usual victims. The case he reports, however, is a young lady, who has had frequent spells for some years. Pulse 85; heart's action steady; temperature 98.5°; bowels regular; appetite good; catamenia regular since puberty; extremities cold; body in perspiration; pain in left ankle, but no swelling; and for three weeks was unable to rise from a horizontal position. As her appearance indicated it, he attributed her condition to chlorosis. Ordered aromatic fomentations to ankle and a teaspoonful of a mixture of fluid extract of valerian and chloral every two hours. In a few hours she was comparatively well and free of pain. Gave 3 to 5 pills 3 times daily of—

℞.—Ferri sulph.,
Potass. carb.....aa ℥ ss.
M. Make 400 pills.

She improved during first week afterwards, but relapsed during second week. Hyperæsthesia and anæsthesia of parts of her body alternated. Pain developed especially acutely near sagital suture or near joints, with convulsions, choking sensations. She begged for rubbing, and her mother and sister were always obeying. Finally the Doctor determined to separate patient from her over-sympathetic and pitying family. He moved her away from home and interdicted the visits of her family or other friends. After a hard physical struggle, she regained her self-control, got well, and has remained so since.

Supposed Abscess of Brain.

Dr. Howard J. Williams, of Macon, Ga., reports (*Atlanta Med. and Surg. Jour.*, July, 1887) the case of a white locomotive engineer, aged 40, residing in a malarial section. Some time ago he was stunned slightly by a lick on the head, but soon got up and went to work again. Since then he has had head pains and slight vertigoes. On the day Dr. Williams was called, he was taken somewhat suddenly with headache, and was stupid, had fever, was nauseated, vomited at intervals, tongue coated, but appetite good. At times there was low muttering delirium, but pulse was only 60 to 64, and respiration about 12 to 14 per minute; pupils contracted and slight photophobia; no paralysis, yet could not control blad-

der or bowel actions; neither anæsthesia nor hyperæsthesia. Treatment expectant. Temperature declined from 99.8° to 98.6°, but head pain increased, and became more or less paroxysmal. Coma set in. Periods of excitement occurred, and he would get out of bed and walk about. A month later, without warning, he had a sudden discharge from nose of offensive greenish pus, followed by stertorous breathing and irregular pulse. Left pupil dilated; right contracted, and both were insensible to light. Right face and extremities paralyzed. Temperature rose quickly to 103°. No convulsions. Death in six hours. Abscess of anterior portion of brain would cause above symptoms. This abscess opened most probably into the lateral ventricle, and through the ethmoid bone into the nose. There was no sign of chronic bone disease about the nose, nor any middle ear trouble. Unfortunately no post mortem was allowed.

Mistletoe Better Than Ergot.

Dr E. W. Lane, Scarboro, Ga., says (*Atlanta Med. and Surg. Jour.*, July, 1887) mistletoe acts more directly on the fundus of the uterus than ergot, and hence is *the* remedy to expel retained placentæ. Dr. T. J. Johnson, in a paper before the Ogeechee Medical Association, reports a case in which he expelled hydatid tumors in a few days with it. It is used also to expel a dead fœtus.

Alcohol Poisoning.

Dr. W. B. Parks, of Atlanta, Ga., classes (*Atlanta Med. and Surg. Jour.*, July, 1887) alcohol with the purely narcotic poisons. If liquor be drunk in large quantity at one time—not in broken doses—it causes apoplexy or coma and death within a few hours. If the narcotic effects pass off, gastro-intestinal irritation or inflammation set in. Taken for a long time in moderate doses, it causes cerebral anæmia—brain disease, in short.

Imperforate Hymen.

Dr. C. O. Weller, of Austin, Texas, reports (*Daniel's Tex. Med. Jour.*, July, 1887) the case of a girl, aged 13 years, whose abdomen was enlarged to the size of a pregnancy of some five or six months, and who had monthly menstrual symptoms regularly, but no discharge, since August, 1886. The pains became very severe, and in March, 1887, she had a general convulsion. The next day Dr. Graves and Dr. Weller incised an imperforate hymen which was bulging

out, and several "chamber pots full" of black, bloody fluid were discharged.

Cold Water to the Head in Fevers.

Dr. F. W. P. Butler, of Edgefield, S. C., says (*Trans. S. C. Med. Ass'n*, 1887) when patients are particularly sensitive to cold, and even when well, are peculiarly averse to cold water administered in other ways, he has found this line of treatment good. Bring the patient across the bed; cautiously protect, especially the lower extremities, with blankets, hot bottles, etc. Then pour a bucket of fresh spring or well water gradually on the back of the head. If the temperature is not sufficiently reduced, he repeats the application until he accomplishes what he wants. In every case where this plan has been resorted to, it has done good, and invariably the patients are relieved and refreshed. It may be repeated three or four times a day. It does well where there is muttering delirium. He cites several cases in proof of the great value of his plan.

[But the recent invention of Mr. H. W. Sitwell, proprietor of the Virginia Rubber Company, of Richmond, Va., for the purpose of applying cold to the head, or any other part of the body, so far surpasses the plan of wetting the head, the bed, etc., that it must soon supersede any other plan that has yet been suggested. He is now about ready to begin to supply the profession and trade. The invention is simple, but effectual. The cost of apparatus is from $5 to $7, according to size, and one will serve for years.]

Over Seventy Pieces of Glass in an Infant's Stomach.—Recovery.

Dr. J. C. McMillan, of Marion, S. C., reports (*Trans. S. C. Med. Ass'n*, 1887) the case of an infant, aged 10 months. While playing on the floor where a lamp chimney had been broken, he swallowed a large number of pieces before being discovered. The Doctor saw the child the day afterwards. Aside from temperature of 99.5°, the infant seemed to be well, although constipated for two days. Castor oil, flaxseed and slippery elm were given. The glass began to pass a few hours afterwards. The oil, etc., was continued for four days—pieces of glass passing each day. The mother did not collect the glass on the first day, but during the three succeeding days *seventy pieces* were passed and counted, varying in size from a quarter to three quarters of an inch in length. After this the patient got along nicely, although

some of the glass (pieces not counted) remained in the bowels and did not stop passing until after the sixth day. No symptom of inflammation, ulceration or obstruction occurred.

Cocaine for Cautery of Chancroids—Iodoform for Screw-Worms.

Dr. D. Berry, of San Antonio, Tex. (*Daniel's Tex. Med. Jour.*, July, 1887), is greatly pleased with the anæsthetic effect of 4 per cent. solution of cocaine on a chancroid before applying fuming nitric acid.

In another case he found the vagina of a woman, aged 65, filled as far as he could see with "screw-worms," and the same condition existed in the rectum as far as could be revealed with the rectal speculum. After washing away as many as possible with warm water, he swabbed the parts with a mixture of equal parts of iodoform and glycerine, and used a warm water injection about three hours later, which brought away a large quantity of dead worms. Iodoform kills them almost instantly.

Quadruplet Births.

Dr. S. T. Lowry, San Antonio, Tex. (*Daniel's Tex. Med. Jour.*, July, 1887), reports the case of a German woman, who, having had several single children by her former husband, about a year after her second marriage was delivered of four well-developed female children at the end of six months' utero-gestation. All showed some signs of life at birth, and each measured 12 inches in length, and weighed about 2½ pounds each. Each child was in a separate membrane, with separate cords and placentæ, but were attached to each other at their margins. These were removed with some difficulty, and there was considerable hæmorrhage. Mother recovered well and rapidly. In Collin's tables of over 129,000 deliveries, there was only one quadruplet birth.

How Many Electrical Sittings are Required?

To this inquiry, so usually asked by patients, Dr. F. T. Paine, of Comanche, Tex. (*Daniel's Tex. Med. Jour.*, July, 1887), advises to say: The ordinary sponge electrodes, when first applied, gave you inappreciable pain; you will improve in a direct ratio with the increase or improvement in sensation. This is especially true of the lower half of females, including the genitalia, ovaries, and mammæ, whose menstrual functions are abnormal. The cure follows the return of electro sensibility.

Extra-Uterine Gestation Successfully Treated by Electricity.

Dr. Thomas Legare, of Charleston, reports the case in the *Transactions of the South Carolina Medical Association*, 1887. On February 20th, Mrs. B., aged 35, mother of a child 4 years old, had her catamenial period. In March, when the period should have occurred, she had severe hypogastric pain, but no discharge. The breasts became swollen, and the patient believed herself pregnant. Five days after the period had been due, she had severe hypogastric colicky pain, which pain recurred on the 27th and 28th. April 3d, slight flow of blood for a few minutes, and again on 9th and 10th. On 11th, the show lasted three hours, and was dark and watery. On 13th, there was exceedingly severe hypogastric pain for two or three hours, and recurred on 14th and again on 15th. Collapse was alarming. On 18th, he found a walnut-size swelling in Douglas' pouch, and breasts tender and swollen. Recurrence of hypogastric pain on 21st, and the swelling increased. On 25th, portions of decidua were expelled from uterus, but the swelling gradually enlarged, and pulsations developed in it; there was continual slight red discharge from vagina. On May 10th, became so convinced of extra-uterine pregnancy that he applied one pole of an electro-magnetic battery per vaginam, to the most prominent part of the swelling, and the other pole on the abdomen opposite the tumor. [How much electricity was given?] No pain was felt after the applications. Electricity was repeated on 11th, 12th, and 13th. On 14th, the tumor had diminished so much that he was satisfied he had arrested the gestation, and did not repeat the electricity. On May 15th, milk appeared in breasts. The abdominal swelling gradually lessened in size. A little dark-colored discharge continued until June 3d. On June 10th, catamenia returned. After July, a small, flat, elongated body was all that could be detected in the site of the swelling, which once was the size of a man's fist. The extra-uterine pregnancy was no doubt caused by retroversion of uterus.

Revelations of a Woman Doctor Reviewed

Is the title of a very unscientific and harsh paper by Dr. T. J. McColgan, of Celina, Tenn., in the *Southern Practitioner*, July, 1887, of an article that appeared "in a recent number of the Cincinnati *Lancet-Clinic*" by "a female medical student." If she has recorded physiological or medical *facts*, let them stand until some more just reviewer comes along to turn them to practical account.

Urethran for Subsultus in Fever.

Dr. E. J. Beall, of Fort Worth, Tex. (*Daniel's Tex. Med. Jour.*, July, 1887), found great benefit from the following;

℞. Terebene.. ....gtt. xvj
Acid. sulphurosi.....gtt. xl
Urethran.....
Antipyrin ....āā ℈j
Acaciæ pulv..... .....q. s
Elix. aq. flor. aurant. ad.....℥j

M.—S. A fourth part every three hours.

Fracture of Femur and Forward Dislocation of Tibia and Fibula.

Drs. A. L. Hill and W. B. Young, of Sparta, Tenn., report the case (*South. Prac.*, July, 1887). The man also received internal injuries by the dynamite explosion, and died in a few hours. Dr. S. D. Gross gives this case the value of mention, as he never witnessed but one such case.

An Address

Is the title of a well written retrospective view of the advances in medicine in this country, and eulogiums of great American doctors, by Dr. Robert T. Hooker, Arlington, Ky., in *Nashville Journal of Medicine and Surgery*, July, 1887.

Acute Catarrh in Children.

Dr. Thomas Hunt Stucky, of Louisville, Ky., says in *Progress*, July, 1887, that good warm clothing, dry feet, and avoidance of frequent wetting of hair, are great hygienic aids to the prevention of attacks of coryza or "colds"—especially in children. If it begins and develops rhinitis, unless speedily relieved, the membranes of the anterior nares become hypertrophied, with oftentimes a painful occlusion of the nares, anosmia, or loss of olfaction. The best results with children have been obtained by drop doses of tincture of aconite every two hours. Locally—

℞. Cocain. muriat.....gr.iv
Acid. boracic.....gr. x
Aq. distillat.....℥ij

M. Filter. S. Use with an atomizer.

Hæmatemesis due to Sarcoma of Liver.

Dr. J. B. Henderson, of Sun Hill, Ga., reports a fatal case (*South. Prac.*, July, 1887) due to medullary sarcoma of liver.

Puerperal Infection.

Dr. John H. Burchmore, of Evanston, Ind., believes (*Nashville Jour. Med. and Surg.*, July, 1887) puerperal fever to be both autogenetic and heterogenetic.

Pneumonia

Is the title of a paper by Dr. T. K. Powell, of Dancyville, Tenn. (*Nashville Jour. Med. and Surg.*, July, 1887), in which he makes no point that is not stated in the text-books—one or more.

Book Notices.

System of Gynæcology by American Authors. Edited by MATTHEW D. MANN, A. M., M. D., Professor of Obstetrics and Gynæcology, Medical Department of University of Buffalo, N. Y. Vol. I. Illustrated with 3 Colored Plates, and 201 Engravings on Wood. Philadelphia: Lea Brothers & Company. 1887. 8vo. Pp. 789. Leather. (From Publishers).

Here is the book that every general practitioner and special surgeon for female diseases is compelled to have. Beginning with the "historical sketch of American Gynæcology," by Dr. Edward W. Jenks, of Detroit,—"imperfect though it necessarily be"—the medical reader becomes interested, and he gains information as he follows page by page to the end of the volume. Of course the work is standard authority, and will control gynæcological practice for years to come. Almost all of the authors selected are well-known gynæcologists in this country. Dr. Richard B. Maury, of Memphis, is the only distinctively Southern writer in this Vol. I—his subject being "Peri-uterine Inflammation," which covers 60 pages, and is an excellent *practical* review of the subject. Dr. Henry J. Garrigues, of New York, has chapters on the "Development of the Female Genitals," and on "Malformations of the Female Genitals," in which latter he thinks that, to settle the disputed anthropological question as to the difference in location of the hymen in the white and negro, Southern practitioners should make further exact observations on the negro. The chapter by Dr. Henry C. Coe, Pathologist to Woman's Hospital State of New York, on "Anatomy of the Female Pelvic Organs" takes up 140 pages, and is excellently descriptive of the parts. No practitioner can attentively read the section

on "Gynæcological Diagnosis," by Dr. Egbert H. Grandin, of New York city, without feeling that he is better prepared thereby to undertake gynæcological practice. The chapters on "General Consideration of Gynæcological Surgery," by Dr. E. C. Dudley, of Chicago, and on "General Therapeutics," by Dr. A. J. Skene, of Brooklyn, are full of special instruction as well as general good advice. The important subject of "Electricity in Gynæcology" is written by the master hand of Dr. A. D. Rockwell, of New York city. If there is an article that falls below the standard of merit that characterizes this volume, it is the one on "Menstruation and its Disorders," but it occupies only 32 pages, and has not been revised since it was written. Dr. A. Reeves Jackson, of Chicago, writes well on "Sterility"—its causes and relief. The Editor gives paragraphic descriptions and plans of treatment of the numerous "Diseases of the Vulva." Dr. C. D. Palmer, of Cincinnati, is the author of the important chapter in this Volume for general practitioners, on "Inflammatory Affections of the Uterus," and has done his task magnificently well. Dr. Thaddeus A. Reamy, of Cincinnati, gives a good chapter on "Subinvolution of the Uterus and Vagina." Dr. Eli Van de Warker, of Syracuse, N. Y., has the concluding chapter in the Volume on "Pelvic Hæmatocele and Hæmatoma," which is a good one.

This "American System of Gynæcology" is indispensable to the practitioner. We are, however, a little surprised that comparatively so few *American* authors are quoted in "Author's Index" in a work proposing to give distinctively *American* practice. Of course references could not be omitted in any gynæcological work to the contributions of Sims, Battey, Emmet, Thomas, Parvin, Goodell, Mundé, etc. But we are a little disappointed that the hundreds of, what the authors may style, minor practical suggestions of *American* practitioners, as they have been for years appearing in *American* journals rarely have mention, while many more trivial details of foreign contributors to foreign publications are paraded as specially valuable. Several of the authors unfortunately seem impressed with the idea that their opportunities to mention themselves, or insist upon their own practice a little more than they ought to have done should be taken advantage of. We know it is hard to disrobe ones self on parade occasions of egotism; but still it is possible to do so, and make a better show of National proficiency. If there is any department of medicine in which American general practitioners excel their foreign brethren it is in the department of gynæcological surgery and therapeutics.

Pathology and Treatment of Gonorrhœa and Spermatorrhœa. By J. L. MILTON, Senior Surgeon to St. John's Hospital for Diseases of the Skin, London. Octavo, 484 pages. Illustrated. Price, bound in extra muslin, $4.00. New York: William Wood & Company.

This is not a book intended for a college student, for it only refers to symptoms without specially describing them. The author presumes a familiarity on the part of his readers with these elementary things, and goes at once to those subjects which he thinks will interest the advanced student or the studious practitioner. About 50 pages are taken up with the history and pathology of gonorrhœa, and about 60 with the history and pathology of spermatorrhœa and impotence. All the rest of the book is taken up with descriptions and considerations of different plans of treatment of these conditions and their complications. Properly used, it is an invaluable consultation book, filled with sound doctrines and good, practical directions as to treatment.

Treatise on Diphtheria, Historically and Practically Considered, including Croup, Tracheotomy and Intubation. By A. SANNÉ, Docteur en Medicine, Ancien des Hospitaux de Paris, etc *Translated, Annolated, and the Susgical Anatomy Added.* Illustrated with a full page Colored Lithograph, and Many Wood Engravings. By HENRY Z. GILL, A. M., M. D., L. L. D., Late Professor of Operative and Clinica Surgery, Medical Department, University of Wooster, Cleveland, Ohio, etc. St. Louis: J. H. Chambers & Co. 1887. Price, Cloth, $5; Leather, $6 8vo. Pp. xxxii.—656. (From Publishers).

This is an excellent context book for the *practitioner.* It is "too profuse" for the college student, and, indeed, it was not intended for him. Although the title of the book implies a belief in the "dual theory"—a difference between diphtheria and croup as distinct diseases—the differential diagnosis is nowhere succinctly stated, and has to be learned rather from a general than from anything approaching a tabular statement of the distinctions. He looks upon croup as a part of diphtheria when it invades the larynx. In regard to treatment, almost every article of the materia medica that has ever been authoritively recommended receives a sentence or two of review mention. The author objects to the "calomel treatment," says that alkalies are of "doubtful efficacy," and the tartar emetic plan demands the "strictest precautions." As to the so-called specific treatments by (1) sulphuret of potassium, (2) by bromine, (3) by iodine, (4) by the balsams, and (5) by the expectorants, the facts are given in each case, and, practically speaking, the reader is left to

judge for himself whether to adopt any of them or not. He says "the specific remedy for diphtheria is not yet discovered." Antiseptic treatment is worth continuing. Of the restorative treatment he speaks favorably, and refers to a number of wines, but singularly neither the author nor the annotator speaks of plain good whiskey, which is to be had anywhere in this country at least, and is far superior to any of the wines. The author thinks caustics are dangerous and useless. Astringents are serviceable. Of solvents, lime water and lactic acid are the best. The surgical treatment by tracheotomy especially is fully and well described by the aid of drawings. Intubation is also described. The book as a whole is an excellent library book for consultation purposes by the professor and leisure hour practitioner.

Elements of Physiological Psychology. By GEORGE T. LADD, Professor of Philosophy in Yale University, New York. Charles Scribner's Sons. 1887. Cloth. 8vo. Pp. 696—xii. Price $4.50. (For sale by West, Johnston & Co., Richmond).

The study of the mind and its derangements has made such advances in recent years, that old things have passed away and all things have become new. The psychologist of 50 years ago, as the chemist of that day, would now have to begin the study of his alphabet, and learn anew the arrangements of doctrines in order to understand what he thought he knew. Professor Ladd's "Elements" furnish a great help to the student. It is not, strictly speaking, a medical book; but doctors, who are of course expected to be informed and even tutors as to facts and theories relating to the relations of mind to matter, and *vice versa*, cannot well afford to let this book go by without study. It also gives many facts of instruction which will help them to understand the phenomena of mental action as they observe them in the daily practice of their profession.

Drug Eruptions. A Clinical Study of the Irritant Effects of Drugs upon the Skin. By PRINCE A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases; Consulting Surgeon to the Bellevue Out-Door Department, etc., etc. Octavo, 206 pages, one lithographed plate. Extra Muslin. Price, $1.75. New York: William Wood & Co.

Such a book as this must oftentimes prove a great comfort to a practitioner when he observes some "breaking out on the skin" that he could not account for, except by referring it as an effect of the medicine. Dr. Morrow will long be entitled to the thanks of the profession for the pains-taking re-

search which was required to make this book so perfect as it is. To attempt a fuller notice would compel us to take up some of the effects of some of the individual drugs named in the book; but our limited space forbids. The book is very serviceable, and is quite well indexed.

Anæmia. By FREDERICK P. HENRY, M. D., Professor Clinical Medicine, Philadelphia Polyclinic, etc. Philadelphia: P. Blakiston, Son & Co. 1887. 16mo. Pp. 136. Price 75 cents. (For sale by West, Johnston & Co., Richmond).

Singular as it may seem, of the thousands upon thousands of books published in the United States, the manual size book before us seems to be the first systematic treatise on anæmia published in this country; and this is a reprint of a series of articles that have recently appeared in the *Polyclinic.* It is for the most part based on personal observation and accepted facts of physiology and pathology, and it is a good monograph on the subject.

Outlines for the Management of Diet. By EDWARD TUNIS BRUEN, Assistant Professor of Physical Diagnosis, University of Pennsylvania, etc. Philadelphia: J. B. Lippincott Company. 1887. Extra cloth. 12mo. Pp. 138. Psice $1. (For sale by West, Johnston & Co., Richmond).

This is one of the series of "Practical Lessons in Nursing" which has been so commendably undertaken by the world famed Publishers named in the above title. It points out the principles which should be understood in the regulation of food to the requirements of health and the treatment of disease. It is written in language plain enough to be valuable to heads of families, nurses generally, etc. And if practitioners would only get the friends of their patients and nurses to adopt such a book as this for their general guide, they would greatly lessen their duties and benefit their patients. We heartily commend this book.

Cremation of the Dead. By HUGO ERICHSEN, M. D., Licentiate of R. C. P. & S., Kingston, Canada, etc. With an Introduction by SIR P. SPENCER WELLS, Bart., F. R. S. Late President R. C. S., England, etc. Illustrated. Detroit: D. O. Haynes & Company. 1887. Demi 8vo. Cloth. Pp. 264.

To all who take interest in the subject of cremation, this book will be valuable reading. It is certainly very entertaining also. It discusses the subject from an æsthetic, sanitary, religious, historical, medico-legal and economical stand-

point; and from these standpoints, the authors become advocates of the measure. The question of how to dispose of the dead is possibly an important one in a few of the large cities of the world; but in the more rural towns and districts it is a matter of no interest, except from a sentimental point of view. The Irishman, asked upon the gallows, how he wished the rope tied around his neck, responded: "Plase yer honor, if it suits you as well, I'd rather for it not to be tied at all." We do not wish cremation of those dear to us.

Physician's Dose and Symptom Book. By JOSEPH H. WYTHE, M. D., Professor of Histology and Microscopy, Cooper Medical College. 17th Edition. Completely Rewritten and Enlarged. Philadelphia: P. Blackiston, Son & Company. 1887. Cloth. 16mo. Pp. 226.

The mention of the contents of this pocket size book which was first issued over twenty-five years ago, with improvements in each edition, will show how useful it may be to any practitioner, hastily called without opportunity to refer to fuller authorities. The physician should keep such a book as this in his buggy or saddle bags for reference while en route to a patient. It contains the mention of the doses, and uses of all of the principal articles of the Materia Medica and officinal preparations, arranged in alphabetical order; also table of weights and measures; rules to proportion the dose of medicine; common abbreviations used in prescription writing; alphabetical list of Materia Medica; preparations and modes of administrations; list of incompatibilities; hints on prescription writing; table of poisons and antidotes; hints on treatment; table of symptoms, etc.

Vest Pocket Anatomist (founded upon Gray). By HENRI LEONARD, A. M., M. D., Professor of Medical and Surgical Diseases of Women, Detroit College of Medicine. 13th Revised Edition. Enlarged by Section on Anatomical Triangles and Spaces, Herniæ, Gynæcological Anatomy and Dissection Hints. Detroit. The Illustrated Medical Journal Co. 1887. Cloth. Eighty-six illustrations. 154 pages. Post-paid, 75 cents.

This little volume in its former editions is favorably well known. This thirteenth edition contains very clear and accurate topographical plates of the Venous, Arterial and Nervous systems, photo-engraved from the English cuts in Gray's Anatomy. This makes the work especially of value to accompany the surgical case of any practitioner that is doing much work in this line, as a "regional reminder" of the placement of arteries and veins that he may wish to avoid

in making his incisions. For this special purpose this little book, since it has the addition of these eighty-six engravings, is of a good deal of value to the country practitioner, who sometimes does not have the time to return to his office to consult his more pretentious volumes. The "Dissection Hints" show the incisions to be made in post-mortems to advantage.

Editorial.

Seven Springs [Va.] Iron-Alum Mass for Gonorrhœa.

About two years ago, an acquaintance dropped in our office on a professional matter, and incidentally remarked that he no longer called on the doctor for the treatment of gonorrhœa, as he quickly cured himself and had cured a number of his friends by the prescription three or four times a day of a piece of Seven Springs [Va.] Iron-Alum Mass about as large as two good size English peas. The correctness of this statement was confirmed by a friend, as to himself, who came in the office with him. He said that he used no injection whatsoever. He further told us that he incidentally first noticed this effect upon his gonorrhœa after using the "mass" which we had prescribed for another purpose.

These statements so impressed us that we determined to further test them. And now after some eighteen months of constant prescription of it for gonorrhœa we have come to the conclusion that it far exceeds any of the vaunted "specifics." An excellence about it is that it can safely be used during any stage of ordinary gonorrhœa or gleet. Our experience with it covers about 40 cases of gonorrhœa, and we recall only one decided failure to do any good. In not more than 3 or 4 other cases was its value doubtful. In about 15 cases it acted well, but needed the aid of injections; and in the remaining 20 or 25 cases, it cured the gonorrhœa in from ten days to about three weeks. In some 8 or 9 of these latter cases it acted "like a charm"—curing the patients in less than two weeks. On some future occasion, we will try to find time to systematize this experience into a paper; but in the meantime we have thought it well to throw out the

suggestion which we incidentally came in possession of for the experience and observation of our readers.

We have made no modification of our original prescription except it be to give the quantity—about the equivalent in mass of 2 or 3 English peas or as many compound cathartic pills—in Planten & Sons' or Truex' capsules, washing them down with a swallow or two of water. If this amount of the "mass," three or four times a day, produces too frequent movements from the bowels, diminish the dose so as not to induce more than two stools in the twenty-four hours. If this dose is not sufficient to bring about at least one soluble stool a day, increase the dose slightly. If it occasions headache or slight "swimming sensations," these may be relieved or averted by sodium bromide. If the patient prefers a fluid preparation, the "mass" is readily soluble in water. Of course the ordinary injunctions as to abstinence from stimulating drinks, or condiments, etc., avoidance of too much physical exercise, etc., are to be given.

St. Luke's Home for the Sick.

The private hospital in this city which has such a broad reputation for excellence, under the special medical and surgical care of Dr. Hunter McGuire, and an able corps of assistants, is closed for repairs from August 10th to September 10th.

The Texas Medical College and Hospital

Is being reorganized with Dr. D. F. Stuart, of Houston, as President of the Board of Trustees. The Faculty is now being selected, and due announcements will be made of the course of lectures, clinics, etc., to begin during the fall of 1888. It is estimated that Texas annually supplies about 400 medical students to all the other institutions of the United States.

Medical Society of Virginia,

From the correspondence of the Secretary of the Medical Society of Virginia, the indications are that the Eighteenth Annual Session, to convene Tuesday night, October 18th, in Richmond, will far exceed in interest any session yet held. The number who promise to be in attendance is much larger than usual, and among them are many distinguished visitors. The subject for general discussion is "The Choice of Anæsthetics," Dr. Hunter McGuire leader. There never was received so far in advance of a session so large a number of

applications for fellowship as are already in the hands of the Secretary. Let each member induce all of his worthy friends and acquaintances to join the Society this year.

Quarantine on the Mississippi River.

The *Mississippi Valley Medical Monthly* says editorially that Dr. Joseph Holt, President of the Board of Health, two years ago determined that an infected and an uninfected vessel should not lie at the same quarantine. All suspected vessels are required to go to an isolated station, be disinfected, and so remain until there is no probability of contagion. The suspected vessel is deluged—decks, bilge and furniture —with a bichloride solution, and all baggage and bedding are placed in a steam chamber (217°F.) and remain for some time in a temperature raised to 240°—this being a substitution for the immersion in corrosive mercury solution at first practised. After thoroughly cleansing the vessel with the bichloride solution, a steam fan revolves on the station tugboat, drawing in from 150 to 400 pounds of pure sublimated sulphur, in combustion in a furnace. The sulphurous acid gas thus generated is forced by the revolutions of the fan into the hold of the vessel, penetrating its every part. Mercuric chloride is a reliable germicide in strength of 1: 10,000, and bacilli spores are destroyed by a solution of 1: 1,000. Moist heat (221°–230°F.) destroys all living organisms, including the most refractory spores. Experiments with sulphurous acid gas give equally satisfactory results. Thus, Dr. Holt employs the three most powerful disinfectants and germicides. This should give confidence to the effectiveness of the quarantine at the mouth of the Mississippi—the principal inlet for the germs of yellow fever and cholera.

New Members of the North Carolina Board of Health.

Gov. Scales has appointed Prof. W. G. Simmons, of Wake Forest College, Mr. Arthur Winslow, C. E., of Raleigh, and Dr. J. H. Tucker, of Henderson, members of this Board, to fill vacancies. His selections have been admirable. Dr. Tucker is an eminent physician of his State, and is an honest, earnest, hard worker. It was Prof. Simmons who contributed that excellent paper on "Illuminating Oils," of which we published a synopsis in our May number, and a reprint of which paper should be placed in every intelligent family. Mr. Winslow's studies on water supplies, etc., conjoined with ability as a civil engineer, specially qualify him for his present position.

American Rhinological Association.

The programme for the Fifth Annual Meeting, to be held in Washington, D. C., September 1st, 2nd and 3rd, 1887, has lately been issued by the Secretary and Treasurer, Dr. P. W. Logan, of Knoxville, Tenn. The profession generally is cordially invited to attend the sessions. About twenty titles of papers and discussions with as many authors and leaders are announced. Singularly, only one of these (Dr. Hobbs, of Atlanta, Ga) is from an Atlantic State, though all of them have extensive reputations—some, more than national. Dr. J. A. Stucky, of Lexington, Ky., is President, and Drs. C. H. Von Klein, of Dayton, O., and John North, of Keokuk, Iowa, are Vice-Presidents.

The Medical Record,

During the Ninth International Medical Congress, in Washington, D. C., beginning September 5th, 1887, will have on hand a large and capable staff of medically educated stenographic reporters, who will prepare a condensed report each day of the proceedings, to be telegraphed to its home office in New York, and immediately prepared by the editorial staff for publication in its current issues.

Daily Edition of the Medical Register during the International Congress.

We invite the special attention of our subscribers to the advertisement of the *daily edition* of *The Medical Register*, of Philadelphia, Pa., during the session of the Ninth International Medical Congress, to assemble in Washington, D. C., September 5th, 1887, and urge upon each of them the importance of subscribing *at once* for the same.

Typographicals.

We did our contributor of the excellent paper in July No., on "New Methods of Treatment in Diseases of the Respiratory Organs," an unintentional injury by the foot-note, page 269. It illustrates that "striving to better, oft we mar what's good." Dr. Slaughter's remarks on "Diathesis" are not quoted from Bouchut, but from *Bouchard.* (Leçons sur les Auto-Intoxications dans les Maladies. Paris, 1887. F. Savy.) In the sentence of paragraph about middle of same page read "The healthy man is *not* liable," etc. Page 304, line 8 from bottom, the word "alkaloid" should be *alkaline.*

In Dr. White's paper, line 3 from top of page 286, read *desuetude* for "desultude."

Lawson's Abdominal Bands.

Our attention was sometime ago called to these sleeveless shirts or abdominal bands, but we have only recently had an opportunity of examining them. Now that they are introduced, that doctor who does not use them whenever he wants an abdominal band will soon be classed among the "old fogies. In young children especially are they excellent, and are the very things to take the place of wrapping the body with flannel bands. Of the proper size, they are very comfortable for grown persons—especially in cold weather. For young ladies who will indulge the low neck and no sleeve style of dress, these shirts or bands are *invaluable.* Note the makers' name in our advertising department, A. M. & F. D. Lawson, who have also a national reputation as the only authorized manufacturers for the seamless shirts necessary in adjusting Sayre's plaster of Paris jackets.

Dr. Wm. A, Hammond, of New York,

Who has perhaps been among the busiest of active practitioners in America for a long period, and whose investigations and records have established him as the father of, and *the* authority in American Neurology, is now enjoying the first vacation he has had in twenty-three years at Mackinac Island, Mich.

Miss Kate Rozer, M. D.,

Of District of Columbia, has, we believe, the honor of being the first lady who has ever graduated in medicine from a Southern medical college. She graduated during the recent commencement of the Hospital College of Medicine, of Louisville, Ky.

Sander & Sons' Pamphlet on Eucalypti Extract. (Eucalyptol.)

We specially recommend to our readers to secure a copy of this pamphlet. The little book, supplied *gratis* on application to Dr. Sander, Dillon, Iowa, illustrates, in a succinct form, the splendid results obtained at the clinics of the Universities of Bonn and Griefswald, and shows beyond question that the *genuine* drug governs, in its effects, a very varied class of complaints. The details given are very instructive, and must prove of great advantage to every practitioner.

Dr. T. G. Richardson,

Of New Orleans, has been called to Europe by the illness of a relative, and hence will not attend the International Medical Congress.

Aqueous Solution of Hydrogen Sulphide for Consumption.

Dr. H. C. Wood, of Philadelphia, claims that just as good results are obtained by administering an *aqueous solution* of hydrogen sulphide, either by mouth or enema, as by Bergeon's method. Dr. John Marshall, of the Chemical Laboratory of the University of Pennsylvania, Philadelphia, Pa., has devised an apparatus for preparing this water, which costs only $5 boxed ready for shipment. The necessary chemicals and directions for use are furnished with each apparatus. As Dr. Slaughter's article in our July number pointed out, "Dr. Marshall has so calculated and arranged the mixtures that the water is simultaneously impregnated with carbonic acid and sulphuretted hydrogen, and the liquid obtained has a sweetish, not an unpleasant taste." We call special attention to this apparatus, etc., because it enables the patient to carry out Bergeon's treatment after a single instruction by the doctor. This plan of administering Bergeon's treatment is an improvement on the plan of gaseous enemata.

Dr. Richard H. Lemmon,

Died at his home in Lynchburg, Va., July 6th, 1887, from acute gastritis; age about 33 years. He had organic heart disease for years. He was a graduate of the Medical Department of Tulane University of New Orleans, and was a Fellow of the Medical Society of Virginia when he died. The Lynchburg Medical Faculty, at a meeting July 7th, adopted the following:

"Whereas, in the dispensation of a Divine Providence, whose ways are inscrutable and past finding out, Dr. R. H. Lemmon has been removed from our midst; be it therefore

"*Resolved*, That we have heard with sincere regret of the death of our late associate.

"*Resolved*, That the medical profession has lost one of its most valuable members, and one who promised great usefulness in his profession.

"*Resolved*, That we extend our sincere sympathy to the members of the bereaved family.

"*Resolved*, That a copy of the resolutions be sent to his family and published in the daily papers and *Virginia Medical Monthly*.

"Drs. Geo. M. Preston, Carter Wade, C. E. Busey, Committee."

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Original Communications.

ART. I.—**To What Extent Can We Classify Vesical Calculi for Operation? Reports of Cases and Remarks on the Different Methods Employed.*** (Continued.) By A. VANDER VEER, M. D., Professor of Surgery, Albany Medical College, etc., Albany, N. Y.

CASE XXVII.—**Litholapaxy—Two Operations—Weight of Detritus, First Operation, about 60 grains—Recovery.**

Mr. S. B., admitted to Albany Hospital August 7th, 1883, and a phosphatic calculus was removed. No ether given. Patient discharged from hospital August 20th, 1883.

Patient returned October 2d, 1883. Operated October 6th, 1883, removing more phosphatic material, patient being this time under ether. No bad effects followed the use of ether, and no fever followed operation. Patient discharged from hospital October 19th, 1883, cured.

CASE XXVIII.—**Operated on by Dr. N. L. Snow—Attempt at Litholapaxy—Breaking of Lithotrite—Lithotomy Lateral—Weight of Stone, 450 grains—Death.**

Mr. W. G., single, native of Ireland, aged 25, engineer; residence, Roseboom, N. Y. Came from Ireland in his early youth. Ten years ago lived a short time in Jefferson, Pa. With this exception, has lived in Otsego Co., N. Y. Both parents living and healthy. Has four brothers and two sisters living, all healthy with the exception of one brother, who is said to have some difficulty with his kidneys. Patient has never been strong. Has complained for ten years of pain in passing water and occasional stoppage. Said to be worse after drinking coffee. No other drink seemed to affect it. Last February was confined in bed for two weeks. Was

sounded, and a large-sized vesical calculus detected. Saw Dr. Snow about June 10th, who found a stone, and advised an operation. He was admitted to the Albany Hospital June 25th, 1884. On the 28th inst. he was placed under ether. and after injecting the bladder with warm water, the lithotrite was introduced, and the stone grasped. Its diameter appeared about two inches. Force was applied, and the stone broke. Attempts were then made to crush the parts, with but poor success. The instrument was then withdrawn, and an attempt made to wash out the particles. This did not succeed well. The instrument was again introduced, and another portion of the stone grasped. The stone appeared very hard, and in attempting to crush it, the instrument broke about one-half inch from the end, leaving the portions of both blades in the bladder. The patient was then placed in position, and the lateral incision was made for lithotomy. The bladder was opened on a rectangular staff, and the forceps introduced. The stone was readily grasped, and after considerable manipulation was extracted. Portion of instrument and small particles were also removed. Stone was very rough, hard, and surface covered by connection tissue shreds. Weight, one and one-half ounce. Bladder was then washed out with carbolized warm water. There was scarcely any hæmorrhage during the operation, but he lost six or eight ounces of blood later in the day. Patient was rather slow in recovering from ether. Operation lasted about one and one-half hour.

Milk and whiskey every two hours. In the evening his temperature was 100°F.; pulse, 140. June 29th, temperature, 102°; pulse, 140 night and morning. Was given one gr. opium every two hours. June 30th, rested fairly well during the night. Urine passed out through wound. Temperature, 103; pulse, 140, A. M. Temperature, 102; pulse, 128, P. M. July 1st, treatment continued. Has a diarrhœa. Had four passages during the night. P. M., opium pill stopped, and camphor and opium pill given for diarrhœa. Hot applications applied over abdomen, with a few drops of oil of turpentine rubbed on each time. Temperature, 101°; pulse, 120. July 2d, no change in treatment. Temperature, A. M, 102; P. M., 104, axillary. July 3d, temperature, 98 4-10; pulse, 140. About 4 A. M. vomited a little two or three times, afterwards troubled with eructations. Pulse growing weak. 12 M., pulse weaker and extremities cold. Vomiting during afternoon. Was given milk and lime water. Gradually grew weaker, and died about 8 P. M. No post mortem.

CASE XXIX.—**Litholapaxy—Weight of Detritus, 36 grains—Recovery.**

Mr. P. B., admitted into the Albany Hospital July 26th, 1884. Has had symptoms of vesical calculus for nine years. Stone was crushed July 28th, 1884, without an anæsthetic. Patient walked to his room after operation, and has had no unpleasant symptoms since. There was no rise in temperature, nor any constitutional

symptoms. Patient discharged cured July 31st, 1884. This patient was a remarkable example of non-sensitive urethra and neck of bladder.

CASE XXX.—**Litholapaxy—Weight of Detritus, 600 grains—Recovery. Second Operation One Year Later—Weight of Detritus, 420 grains—Recove y.**

Mr. W. J. De G., aged 54, married, merchant, good habits. Has had symptoms of stone nearly four years. Entered Albany Hospital October 23d, 1884. On sounding, stone was easily detected. I operated October 24th; time, fifty minutes, Patient recovered without any unpleasant symptoms; bore his daily washings of bladder without any inconvenience; was carefully sounded; bladder in good condition; no fragments detected. Discharged cured November 1st, 1884.

September 29th, 1885, Mr. De G. returned, having suffered for three months from his old symptoms of stone. On sounding a calculous was detected. Patient was in good condition Some cystitis was present. Second operation was done September 30th, with an excellent result. Discharged in a week, feeling better than ever. Has remained well since.

CASE XXXI.—**Litholapaxy tried—Patient Sank so Rapidly Could Not Proceed—Death—Weight of Stone Removed at Autopsy, 1,000 grains.**

Mr. F. M. W., aged 35. Patient has had for four years severe symptoms of stone in the bladder, and until last few months has been quite intemperate. Since then has been sober, though nervously unfit for an operation until to-day, December 29th, 1884. Patient was with difficulty etherized. Litholapaxy tried. There was found a large stone present. Lithotomy advised, but the patient sank so rapidly under the ether that it was thought best not to proceed. He did not rally well, and suppression of urine following, he died at the end of forty hours.

Autopsy revealed four pus cavities filling all portions of the kidneys, ureters filled with pus, bladder sacculated and dilated like little finger.

I was told after his death that he had been very intemperate and exposed himself sadly. Gave no history of renal colic, but nucleus of stone, as you will observe, is made up of uric acid. Outside secondary deposits, phosphates.

CASE XXXII.—**Litholapaxy—Second Operation—Weight of Detritus, 30 grains—Recovery.**

Mr. G. F., aged 68, married, farmer, retired. Gave a history of calculous of about five years' duration. Was operated on ten months ago by Dr. Gouley, of New York, for good sized stone, by rapid lithotrity. Made a good recovery, and was very comfortable up to three or four months since, when his old bladder troubles returned. Entered Albany Hospital June 16th, 1885. I operated under ether June 20th, by litholapaxy, removing a small calculus

after crushing once. Recovered nicely, bladder washed out nicely, and he was made very comfortable by his physician, Dr. Keifer, until his death, three months ago.

CASE XXXIII.—**Litholapaxy—Weight of Detritus, 50 grains—Death from Peritonitis on the Fifth Day.**

Mr. J. G., November 6th, 1885, aged 56. Has passed renal calculi during the last three or four years. A week ago he came to the Albany Hospital, when he was sounded, and a stone found present. He has frequent desire to urinate, pain in head of penis after passing water, and at times sudden stoppage of the stream.

Diagnosis: Vesical calculus, and probably more than one, caused by renal calculi being retained in the bladder. Ether was administered by Dr. King. Thompson's searcher was introduced into the bladder, and the stone found, then three or four ounces of a solution of borax was injected. Keyes' lithotrite was then introduced, and the stone caught and crushed. A No. 27 washing out catheter (Bigelow's) was introduced, and the bladder washed out with borax solution. Considerable detritus was washed out.

The crushing and washing out was again performed, when the searcher failed to find any more pieces. The meatus was slightly contracted, and was enlarged by cutting with the meatatome. Patient was placed in bed with bottles of hot water, and given five grs. of quinine, this repeated every six hours; also given a rectal suppository of opium and belladonna at night, and to take plenty of mucilaginous drink, and citrate of potash to relieve the acidity of the urine. To be watched closely for signs of urethral fever and suppression of urine. After twenty-four hours the bladder was washed out with borax solution. Benzoate of soda was given for the cystitis. November 7th, patient rallied well and had no chill. Has had urine drawn every two hours, and has no pain. On November 11th peritonitis set in, and patient died next morning.

Autopsy: Kidneys were found in a condition of beginning degeneration, and the pelves were filled with pus. Bladder contained a number of small pieces of calculi, lying behind the large prostate, and the walls were enormously thickened. Peritoneum was much congested, and in a condition of active inflammation.

CASE XXXIV.—**Litholapaxy—Weight of Detritus, 120 grains—Recovery,**

Mr. J. W. G., aged 73, married, and a resident of Vermont. Says he enjoyed good health up to about ten years ago, when he began to have some bladder trouble. Passed several calculi, but was not obliged to use a catheter until about five years ago. He began to have at that time the usual symptoms of stone in the bladder—viz., passing bloody urine, pain at the end of penis, etc. He entered the Albany Hospital October 27th, 1885. I examined him, and the diagnosis of vesical calculus of phosphatic formation was made. Was operated upon October 30th, 1885, Bigelow's operation being done. A large quantity of stone was washed out. Rallied

well from the ether, but on the third day his temperature increased to 103°, pulse 120, and complained of severe pain in the bladder. Was relieved by hypodermics of morphia and rectal suppositories. His urine was drawn, and bladder washed out daily with borated water. Ten days after the operation, he was again put under ether and examined, and a portion of stone discovered. This was crushed and washed out. From that time he began to improve, and was discharged cured November 21st, 1885.

March 1st, 1887, Mr. G. had gained thirty-five pounds in weight, and in perfect health. No bladder symptoms. Of all my stone cases, I consider this the most satisfactory in its results. When patient came to the hospital, he begged not to be cut.

CASE XXXV.—**Rapid Dilatation of Urethra—Weight of Detritus, 157 grains—Recovery.**

Mrs. L. L. D., was admitted into the Albany Hospital December 15th, 1885. She complained of pain over bladder; has been feeling ill for the last four years. First noticed severe pain over kidneys, for the relief of which blisters were applied. Pain soon returned. About eleven months ago experienced severe pain over bladder. Began to pass urine much more frequently than before, causing pain of a cutting, burning character. Urine was dark in color, with some deposit, white at first, but red or dark on standing. For the last four months she has been confined to bed, with pain more severe and constant. Has lost strength and flesh.

December 16th, operated on, and stone removed from bladder by rapid dilatation of urethra, and aid of forceps, stone breaking easily. Patient had a chill December 17th, A. M., lasting about ten minutes. At 4 P. M., vomiting commenced, and lasted until 10 P. M. Temperature 101.6°. Diarrhœa through the night. Slightly delirious. December 18th, A. M , feels much better. Temperature, 98°. Bladder washed out. Small quantity of mucus passed. Patient discharged from hospital, cured, December 28th, 1885.

CASE XXXVI.—**Soft Phosphatic Urethral Deposit—Retention of Urine—Deposit Removed by Milking Penis.**

Master B., aged 14 months; poorly fed, and hygienic surroundings bad. Was seen October 8th, 1875, by Dr. N. L. Snow, the little fellow having suffered more or less for nearly two days in his frequent desire to urinate. On attempting to pass a catheter, the Doctor discovered a calculus lodged in the urethra, which he readily removed by milking the penis, The deposit is simple phosphates. The child recovered under the use of good tonics, although the urine for a long time contained free phosphates.

CASE XXXVII.—**Urethral Calculus—Lodged Twenty-four Hours—Removed by Milking Urethra, by Forceps, and Incision of Meatus.**

Master F. G., aged 6. Seen by his physician, Dr. J. M. Bigelow, March 8th, 1879, having had retention of urine for nearly

twenty-four hours, and now in much distress, suffering greatly from a constant desire to urinate. On examination with Dr. B., we found a calculus had lodged in prostatic portion of urethra. Patient was given ether, and by a gentle milking (forceps), together with Thompson's small urethral forceps, and by incision of the meatus, a calculus weighing nearly 10 grains was removed. The urine flowed freely. Hypogastric tumor disappeared, and patient made a rapid recovery. Stone is composed mostly of oxalate of lime.

CASE XXXVIII.—**Litholapaxy—Weight of Detritus, about 120 grains—Recovery.**

Mr. J. B. G., æt. 44, married, farmer, residing in Delaware county, N. Y., admitted into the Albany Hospital March 30th, 1885, with a history from his physician, Dr. Cartwright, of vesical calculus of between two and three years' duration. Condition good. Examination of urine reveals no disease of the kidneys.

April 4th, under ether, rapid lithotrity was performed, patient making a rapid and complete recovery. Weight of detritus removed about 120 grains. Bladder was washed out daily with a solution of borax. Sounded carefully, but no stone. A fragment found, and discharged April 22d, cured.

I examined this patient April 7th, 1887. Bladder in fine condition. No evidence of stone. In every respect improved.

CASE XXXIX.—**Litholapaxy—Probably Sacculated Bladder—Weight of Detritus, 420 grains—Recovery—Second Operation Ten Months After—Weight of Detritus, about 30 grains—Death from Peritonitis and Suppression of Urine.**

Mr. John B., æt. 66, farmer, native of New York State, widower. Has worked very hard all his life, and been much exposed. Was admitted to Albany Hospital January 11th, 1886. Had suffered from symptoms of stone nearly four years. Had been under the care of many irregular doctors, and his case was greatly aggravated. When sent to me by his family physician, Dr. Smith Barker, of Utica, he was discouraged, feeble, and emaciated. Urine revealed no disease of the kidneys. Sound readily detected a large stone. After washing his bladder daily, and the giving of quinine, and free movements of the bowels, on January 15th, 1886, he was given ether, and rapid lithotrity performed. Time, forty-seven minutes. Detritus, 420 grains. He made a most excellent recovery; urine cleared rapidly; enjoyed the washing out of his bladder; was obliged to use catheter as he had done before the operation; and rapidly improved in all his vesical symptoms. On January 25th, returned home, bearing the journey well. From this time on he continued to improve, gaining in weight, and feeling better than he had for years.

During August, 1886, while working somewhat harder than usual, he noticed some of his old symptoms returning, and which gradually increased. September 10th, he was carefully sounded,

by aid of cocaine, by Dr. Smith, and a small stone detected. October 2d, 1886, he again entered the hospital, suffering very much pain in region of bladder, and extending up the ureters. Urine contained albumen and much pus, but no casts discovered at any time. Under the use of cocaine, I sounded him three times, and once detected a stone without doubt. The next day he was given ether, and an attempt made to do litholapaxy, but no stone could be found. He continued to suffer, and on November 6th, under ether, with the understanding that I was to either repeat the old operation, or cut, I passed the Thompson's searcher, detected calculus, and did a rapid lithotrity, washing out about 40 grains of detritus. He recovered very well, and the next morning was bright and cheerful; but at the end of thirty-six hours he began to show great depression, both in body and mind; suppression of urine followed, and he died November 9th, 1886.

Report of autopsy made November 10th, 1886. Examination showed signs of recent peritonitis; the omentum and intestines closely adherent; section through walls of bladder showed them to be greatly hypertrophied; some fluid and several small particles of calculi were found, also the remains of the cyst that held the stone; prostate enlarged; both kidneys diseased; right kidney small and contracted; ureter enlarged; left somewhat contracted; urethra normal; sandy particles found in pelvis of both kidneys.

This was an undoubted case of sacculated bladder, and accounted for the last little stone playing hide and seek whi'e we were searching for it. This patient would probably have done better had we cut him suprapubic. This is another sad case of an old man, with many years of suffering and little care for himself.

CASE XL.—**Litholapaxy—Weight of Detritus, 80 grains—Largely Uric Acid—Recovery.**

Mr. A. B., æt. 44, married, English by birth, and a good liver in every respect, Has had rheumatism. About two years ago began to show symptoms of stone. March 1st, 1883, I assisted the late Dr. N. L. Snow in doing a litholapaxy. Patient took ether nicely, and behaved well in every respect, making a rapid recovery, followed by no unpleasant symptoms. The detritus is almost entirely uric acid.

CASE XLI.—**Attempted Litholapaxy—Small Portion of Stone Washed Out, then could not be Grasped by Lithotrite, and Further Operative Procedure Postponed—Later Lithotomy Done by Dr. LeRoy McLean, of Troy, N. Y.—Weight of Two Stones, about 500 grains—Recovery—Death Two Years Afterwards from some Obscure Disease of the Kidneys, as reported to me by friend of family.**

Esq. M., æt. 54, farmer, married, living near Sand Lake, N. Y. Had symptoms of stone at times for a period of nearly four years. About October 1st, 1883, I attempted rapid lithotrity, but after grasping what seemed to be the edge of the stone twice, I failed after that to find it with searcher or lithotrite. Washed out about

30 grains of phosphatic detritus. He was more comfortable for a time; but his old symptoms returning, Dr. McLean, of Troy, was called, and did a perineal lithotomy, with a good result. It was a case of sacculated bladder, and explained my want of success in the first operation.

Comments.—The question has been asked in the past, and the attempt made to answer it, What is the best operation for stone? To-day I fancy the answer would be very different from that of but a few years since. If we examine critically the cases I have presented, we find that the mortality has been somewhat great. We also find that the conditions and time of life of the fatal cases have been very grave. Cases I, XVI, XIX, and XXXI would perhaps have done better under the high or suprapubic operation—Cases I and XIX eminently so, although Case XIX seems to have died more from shock, and may have had diseased kidneys. Case I. was a kind of stone very difficult to deal with. It was impossible to crush it by any known form of instrument, and Dolbeau's perineal lithotripsy would have availed little. Case XXXI would have died under any form of treatment. His case was hopeless long before he presented for treatment, owing to his very dissipated habits, and the serious condition of his kidneys.

Suprapubic lithotomy under the stimulus given by late im. provements in the manner of reaching the bladder, and which have been so ably presented to us to-day, is likely, for a time at least, to receive much attention from surgeons, who in operating, think they have a large stone to deal with.

Large stones carry with them a record of much suffering and destruction of the system. Fortunately, as the public become better informed, these cases are likely to grow less. They present too often the true surgical kidney, and which, to me, has been difficult of diagnosis in many cases. Case XXXI could not have been saved by any method of treatment, and I am only thankful that he did not die on the table. Had I known more about tumors of the bladder, I am convinced that Case XVI would have been a proper one for exploration, either by the perineal or suprapubic method.

Of the clean lithotomies, the record of recoveries is as

we might expect in such cases of moderate sized stones. They generally do well, and yet I am convinced that this operation for the present, if not for all time to come, must go to the wall. In the minds of patients and their friends the cutting operation is obnoxious. They shrink from its performance, and often readily yield to the crushing operation in whatever form it may be presented. When we consider the possibility, though rare, there is of sterility resulting in any of the perineal operations, and the great dislike to the use of the knife, and the very recent advances and successes in litholapaxy in the young male, we are forced to conclude that soon perineal lithotomy in any form will be an operation seldom done. Some form of severe cystitis or malformation may call for it, but not the medium or small stone.

In the study of suprapubic operation, one is impressed with the earnestness with which it has been presented by some American writers in the past, and the eagerness with which the operation is now being performed abroad, especially by Sir Henry Thompson and others in England.

By the aid of a former student, Dr. W. G. McDonald, now of the Albany Hospital, I am able to present a few statistics on this subject, which I think of value here. With the excellent results we are ever likely to obtain from rapid lithotrity, the operation must necessarily deal with severe cases of large, and in some instances, sacculated stone. I do not believe that we should ever expect from it as great a per cent. of recoveries—it is hardly possible. (*See Table.*)

It will be remembered that at the fifty-fourth meeting of the British Medical Association in 1886, Sir Henry Thompson said in substance of the suprapubic operation: "I shall venture to maintain that it is decidedly superior to the lateral for the removal of stones which are much above the average size, and I do so upon the following grounds:

"(1). Because in the suprapubic operation there are no structures lying in the line of incision, or sufficiently near to be liable to injury by the knife or forceps.

"(2). Increased space for the removal of stone.

"(3). Little or no danger from hæmorrhage.

"(4). Ease of operative procedure.

OPERATOR.	Case No.	Age.	Character of Calculus.	Weight of Calculus.	Deaths.	Recoveries.	Period of Convalescence.	Where Reported.	Complications, Indications, Accidents.
T. Smith, 1 case.	1	43	Phos.	24½ oz.		1	Protracted.	Lon. Lancet. 1867.	Large stone; a second operation was necessary to close fistula.
W. H. A. Jacobson, 4 cases.	2	19	Oxalate.	Not given.		1	3 weeks.	Brit. Med., 10-23-'88.	Multiple calculi; long duration of symptoms; probable disease of kidneys.
do.	3	40	Lithic acid.	do.		1	4 weeks.	do.	Irritable bladder, cystitis, hæmorrhoids, spinal curvature; hard and uneven stone.
do.	4	48	do.	6 dr.		1	9 days.	do.	Free hæmatura, enlarged prostate; small urethra; old pelvic disease.
do.	5	5	Mixed.	Not given.		1	3 weeks.	do.	Cystitis.
M. F. Guvin, 1 case.	6	42	do.	827 grs.		1	4 weeks.	Boston M. & S. Jour., 11-11-'86.	Two calculi, perineal fistula, partial anchylosis of lower extremities.
A. T. Cabot. 1 case.	7	49		1180 grs.		1	3 weeks.	do.	Large stone; stricture.
Walter Pye.	8	48	Phos.	3 oz.		1	5 weeks	Brit Med., 1886.	Large stone; stricture, perineal fistula.
T. Annadale, 1 case.	9	4½	Uric acid	Small.		1	Speedy.	do.	Tube and catheter removed in 48 hours.
Sir H. Thompson, 9 cases.	10	36	Cystine.	2¾ oz.		1		Lon. Lancet, 1886.	No indication given other than large stone.
do.	11	12	Uric acid. Oxalates.	1½ oz.		1		do.	do.
do.	12	62	Uric acid.	14 oz.		1		do.	do.
do.	13	73	do.	2 oz.		1		do.	do.
do.	14	70	do.	Large.	1			do.	do.
do.	15	76	do.	6½ oz.		1		do.	do.
do.	16	66	Phos.		1			do.	Phosphatic deposit relieved by permanent drainage.
do.	17	63	Oxalate lime.	1½ oz.		1	Speedy.	do.	Indications same as No. 10, etc.
do.	18	50	Uric acid	2¼ oz.		1	do.	do.	do.
A. G. Gerstei, 1 case.	19	50	Not stated.	Large.	1			Med. Record, 1886.	Patient emaciated; rigors before operations; four large stones.
Richard Burwell, 2 cases.	20	9	Not given.	2¼ oz.		1	do.	Brit. Med., 1886.	Large stone in a little child, aged 9 years.
do.	21	60	do.			1	Slow.	do.	Large stone; peritoneum seen.
W. Rivington, 1 case.	22	61	Lithic.	23 oz.		1		do.	Stone was 4¾, 3¼x3 inches in various diameters; died three months later of cystitis.
J. H. Morrison. 1 case.	23	52	Uric acid.	1 lb., 6¾ oz.	1			do.	Multiple calculi: operation after perineal failure. Death on tenth day; uræmia.
L. C McPhail, 1 case.	24	11	Not given.	7 dr.		1	Speedy.	Med. Record, 1886.	Large stone in child.
J. N. Howe, 1 case.	25	16	do.	3541 grs.		1	4 weeks.	Rep. Trans. Copenhagan Congress.	All other methods first tried; peritoneum opened.
Litchtenberg, 1 case.	26	15	do.	7 dr.		1	Slow.	Lon. Lancet, 1886.	Cystitis; emaciation, sinus and fistulas followed
A. W. M. Robson, 2 cases.	27	38	Lithiates and Phos.	Large.		1	2 weeks	Brit. Med., 1886.	Encysted stone; severe cystitis.
do.	28	4	Uric acid.	40 grs.		1	13 days	do.	No indication given.
W. S. Tremaine,	29	3½		9 dr.		1	Rapid.	Med. News 1884.	Large calculus; peritoneum seen.
Pilcher.	30	21	Oxalates and Uric acid	207 grs.		1	11 days.	N. Y. Med. Journal, 1886.	Case reported at meeting N. Y. Surg. Soc., and the method of procedure discussed adversely by Sands and others
Sir W. MacCormack, 1 case.	31	7½	Mul.			1	2 weeks.	Lon. Lancet.	No special indications.

OPERATOR.	Case No.	Age.	Character of Calculus.	Weight of Calculus.	Deaths.	Recoveries.	Period of Convalescence	Where Reported.	Complications, Indications, Accidents,
Lawson Tait, 1 case.	32		Not given.	Not given.		1		Med. Press & circulars, Lon., 1884.	A woman.
H. O. Hyatt, 2 cases.	33		do.			1		No.Car. Med. Jour., 1883.	No history obtained.
do.	34		do.			1		do.	do.
Humphrey, 1 case.	35	3½		Large.		1		Proceed. W. London Soc., 1884.	do.
A. Graws. 2 cases.	36 37		do.	Not given.		1 1		Can. Jour. Med. Science, Nov., 1881.	do.
W. T. Beffield, 1 case.	38	70	do.	2 oz., 6 dr.	1			Med. Record, 1886.	Muliple calculi, severe cystitis, contracted bladder, enlarged prostate; Death from bichloride of mercury poisoning (?)
Guyon,	39	72	Hard.	3 oz. Large.		1	5 weeks	Am. Jour. Med. Science, Vol. I, 1883, p. 591.	Nine days earlier an attempt to crush the stone had failed
do.	40	69	do.	2 oz.	1			do.	Death on third day from sub-peritoneal infiltration of urine.
do.	41	69	do.	Multiple. 4 oz.		1	6 weeks.	do.	Two calculi weighing two oz. each; eleven days before an attempt to crush had failed.
do.	42	57	do.	2 oz.†	1			do.	Died on twelfth day; lithotrity had failed ten days before.
do.	43	60		Very large.		1	7 weeks.	do.	Encysted stone, so located that no instrument could pass; stone broken before removed.
Geo. W. Ruchel,	44	4	Uric.	44 grs.		1	3 weeks.	do., 1879.	Long-continued symptoms, debility, etc.
Mercier.	45	30	Not given.	3½ oz.		1	6 weeks.	do., April, 1878.	Case reported by Dr. C. W. Dulles in Am. Journal Medical Sciences, 1878.
Bell.	46	4½		16 grs.		1	2 weeks.	do.	do.
do.	47	3		96 grs.		1	3 weeks.	do.	do.
do.	48	2		120 grs.		1	4 weeks	do.	do.
do.	49	3½	do	Large, bean-size.		1	9 weeks.		do.
Brodie.	50	35	do.	Walnut size.		1			do.
Brady.	51	42	do.	2½ oz.		1	3 weeks.		do.
Betz,	52	6	do.	Acorn size.		1	6 weeks.		do.
do.	53	8	do.	Cherry size.		1 1	6 weeks.		do.
Deering.	54	46	do.	9½ dr.		1	2 weeks.		do.
Watson.	55	56	do.	8½ oz.		1	6 weeks.		do.
Boch.	56	5	do.	1 dr.		1	3 weeks.		do.
do.	57	3	do.	35 grs.		1	2 weeks.		do.
do.	58	4½	do.	59 grs.		1	2 weeks.		do.
Bailey.	59	2⅓		54 grs.		1	3 weeks.		do
Lungenbeck.	60	1¾		Date-seed size.		1	5 weeks		do.
Starr.	61	35		9 dr.		1	2 weeks		do.
Fletcher.	62	2½		69 grs.	1				do. Died on second day.
Rachel.	63	4		2 dr.	1			Am. Jour. Med. Science, April, 1878.	General condition very poor; kidney complications; death on seventh day.
Amussatt.	64	4	Urates ammonia.	720 grs.		1	Protected.	do, Jan., 1877.	No stone could be detected before operation.

It will be observed that there are several cases of quite small stones among this number reported, and that could have been operated on by rapid litbotrity; but then again, this operation was not known when some of these cases were done.

Summary of Table.

	Recoveries.	Deaths.
Whole number of cases (64), all ages	56	8
Cases under fifteen years (25)	23	2
" between fifteen and fifty years (18)	17	1
" over fifty years (16)	11	5
" ages not given (5)	5	0

Sir. Wm MacCormack, F. R. C. S., gives the following statistics in an article published in a recent number of the *British Medical Journal*, March 19th, 1888:

		Mortality.
Recent foreign cases (adult)	46	19.6 per cent.
" British cases, "	57	31 "
Cases from table, "	39	15.3 "
Recent foreign cases (children)	55	23.6 "
" British cases, "	33	.....
Cases from table, "	25	8 "
Whole number cases, adult	142	22 "
" " " children under 15 years	113	10.5 "

"(5). Because in after treatment, urine leaves the bladder more directly than by lateral method.

"(6). Because in the suprapubic, antiseptic dressings may be employed—the contrary in the lateral operation.

"(7). In suprapubic, impossible to cut rectum, or inflict injury to sexual organs, or to make recto-urethral, or perineal fistula; all of which accidents are liable to follow lateral operations."

The objections to the suprapubic operation as presented and discussed by Sir Henry Thompson are:

(1). Opening peritoneum.

(2). Extravasation of urine into cellular tissue about bladder.

"The latter objection, the least considerable, said he, that should any one object that urine may be extravasated about the base of the bladder and corrupt the parts, I answer that it only happens when the parts have been improperly separated by the operator. In regard to the first objection, it does not occur in the practice of modern methods."

In my readings and report of cases, I find that the peritoneum has been seen rarely, and opened but once in any operation.

Sir Henry Thompson went on to say: "I shall never fail to regret that it was not in my power to apply it earlier in in my career, in removing some of the larger stones before you."

In the discussion which followed, Mr. Reginald Harrison expressed himself as favorable to lateral lithotomy in children, having operated fifty times without a death; in adults, lithotrity, save in rare cases. He had experienced no difficulty in removing stones up to five ounces by perineal route. He would be very reluctant to abandon the lateral for suprapubic, save for very large stones.

Mr. Cadge would not go as far as Sir Henry Thompson, while he agreed in a measure. Thought a middle course the safest.

Mr. Jessup spoke of difficulty of removing large stones by lateral operation in children, and enlarged prostate, etc.

Mr. Barwell agreed with Sir Henry Thompson, and spoke of vesico-vaginal fistula in little girls.

Dr. Ward Cousins spoke of the advantage of the suprapubic in encysted stone, and great prostatic hypertrophy.

Sir Wm. Mac Cormack expressed his belief that in children the greatest future development of suprapubic operation would occur.

Mr. Jacobson called attention to the recurrence of stone after lithotrity. Quoting Mr. Cadge, he said it recurred in twenty per cent. of cases; in lithotomy, recurrence in only two per cent. He favored wide application of the suprapubic operation.

The operation was discussed by others favorably.

In the *British Medical Journal*, February 13th, 1886, Mr. Reginald Harrison advocated perineal lithotomy in cases having enlarged prostates, claiming reduction of hypertrophy by operation, as against suprapubic lithotomy.

Prof. Dittel says, the future of stone lies between litholapaxy and suprapubic lithotomy.

At the Fifteenth Congress of the German Surgical Society, 1886, Prof. König submitted the following thesis for discussion:

That perineal lithotomy (median) section is as a prelim-

inary operation for getting rid of small stone, almost free from danger. It is also quite sufficient for removal of medium sized stones and common movable foreign bodies. If there be very large or numerous calculi, encysted calculi or foreign bodies of a peculiar kind, especially metallic bodies, the entrance in the bladder, obtained by this operation is insufficient. High operation is preferable in difficult cases.

Dr. Koser, of Marburg, advocated high operation, as did Drs. Bergmann and Treudelenburg. Others favored lithotrity.*

I think we have yet a great advantage to derive from the suprapubic operation in encysted stone, and when a saccu lated bladder is present; also in hypertrophy and inflammation of the prostate, and some forms of cystitis.

As to the production of sterility in the male by perineal lithotomy—"Teevan's four childless husbands"—Sir Wm. MacCormack's remarks on the same should claim our earnest attention.

It is by no means certain but that a suprapubic fistula may yet be better for the patient than one situated in the perineum.

I select a note from a lecture of Mr. Wm. Cadge, F. R. C. S., June, 1886. He says: "We have in children lack of room in lateral lithotomy, and difficulty in introducing the finger into the bladder, as has been my experience, as well as that of the late Sir Wm. Ferguson and Keith." Mr. Cadge goes on to say: "Among the great dangers of perineal lithotomy, we have, wounding the rectum; hæmorrhage; and leaving stone in bladder after operation. In concluding his course of lectures, Mr. Cadge submitted the following summary of conclusions:

I. In children, litholapaxy should be more generally adopted than hitherto.

II. In male children when stone is at all large, the suprapubic will probably be easier and safer than perineal lithotomy.

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*At the American Surgical Association, Drs. Gouley and Gunn opposed suprapubic operation, while Drs. John B. Roberts and W. S. Tremaine spoke in terms of highest praise. Dr. Dawson further stated that many calculi seen in the Western States were so hard as to render crushing very difficult.

III. In female children, litholapaxy should be the rule for small, and the high operation for large stones.

IV. In adult females, litholapaxy or dilatation and extraction should be adopted for stones of moderate size, vaginal lithotomy for those somewhat larger, and the high operation for those decidedly of larger size.

V. In adult males, litholapaxy should be the rule up to an ounce or an ounce and a half, or for one of that size; lateral or suprapubic lithotomy should be more adopted until its success or failure is demonstrated.

He states that the various symptoms following lithotomy are: Cardiac disturbances, syncope, angina, hiccough, and a grave symptom, polyuria.

The causes of death are often: Surgical kidney, pyæmia, contracted kidneys, infiltration of urine, pelvic abscess, peritonitis, exhaustion, due to shock and hæmorrhage.

Lastly, he says: "I have noticed in these fatal cases, great enlargement of spleen. This occurred in very florid, elderly men, with blue feet and universal congestion. This condition and class of patients would now lead me to prefer litholapaxy in all practicable cases, and when not practicable, to adopt the suprapubic operation.

"Again, recurrence of stone after lithotomy is a matter of much interest, because of its bearing upon choice of operation; on the one hand between suprapubic and perineal lithotomy, and on the other hand between lithotomy and lithotrity. If it can be proved that the recurrence is far more frequent after lithotrity than after cutting operations, this fact should decide one to adopt lithotomy."

It will be observed that in the cases I have reported, the litholapaxies where the stone was small, and even up to moderate size, did quite as well as the clean lithotomies. At the present time, if I were to present conclusions from my own experience and reading on the subject of vesical calculi, I should say that the cases suitable for suprapubic operation, and reasons for the performance of the same, are as have been so earnestly stated by the authors whom I have quoted in this paper.

Regarding the operation of rapid lithotrity, there is much that is wanting in the study of the after condition of the patients, and we ought soon to have valuable statistics upon the subject. I should like very much to know the real per-

centage of second and third operations in these cases. In lithotomy and the old method of lithotrity, Thompson's cases of 716 presents the following:

Number	operated	upon	2nd	time	61
"	"	"	3rd	"	9
"	"	"	4th	"	3
"	"	"	5th	"	2

Also, quoting C. Williams, who says that in 935 lithotomies collected, recurrence took place one case in thirty three.

In a note from the records of the Norwich and Norwalk hospitals, compiled by Mr. Donald B. Day, he says: In a series of 1,125 cases, there were 51 females without recurrence, leaving 1,074 males. To first operation, 140 succumbed, and 50 were for recurrent stone, leaving 884 individuals in which stone might recur. It recurred in 45, an average of 5.09 per cent., and in 5 it recurred a second time. Of the cases of recurrence, 12 were in children and 23 of the rest were above 50 years. The following were the causes:

I. Descent of fresh stone from kidneys. 20 cases in 50.

II. Stone sundetected at first operation. 9 cases in 50.

III. Stones formed on a fragment left behind. 5 cases in 50.

IV. Due to chronic cystitis. 16 cases in 50.

This table refers to recurrence after lithotomy (perineal).

I desire to remark that in this observation, we must consider the fallacy of all tables, as many cases never return or go elsewhere.

The operation of litholapaxy is certainly indicated where the stone is small or of moderate size, and, contrary to the teachings of a few years since, can be done in very young male children with proper instruments. In male adults, if there is severe chronic cystitis, I care not as to the size of the stone, the suprapubic or some form of perineal lithotomy seems best. The cystitis can then be treated successfully, and there is less danger of a reformation. I believe that future statistics will show that cystitis has much to do with the necessity for a second and third operation in litholapaxy. I believe there is one condition in adult males that has not yet received the attention it is bound to demand, and that is the contracted bladder with adhesions, and which must in

some instances embarrass the doing of the suprapubic operation. On anatomical grounds, the suprapubic operation will even be much simpler in the youth, as it is well known that the bladder is much higher in the pelvis at this time in life.

In girls rapid lithotrity or suprapubic lithotomy will undoubtedly reach all cases. In adult women vaginal lithotomy may be added. Like all surgical conditions, it is a solemn position for a surgeon to have his patient with stone, tell him "my case is in your hands. I desire you to perform whatever operation seems best in this particular instance."

Can we yet classify our cases with certainty, as to what is the best and most certain course to pursue for the safety of our patient's life and future comfort?

As a *summary of my own cases*, it will be noted, there were 7 *perineal lithotomies*, with 2 deaths and 5 recoveries, the former being in old men and with very large stones. Of *attempted litholapaxies and an immediate perineal lithotomy*, there were 2 cases, both resulting in death—one in my own practice, and one in that of the late Dr. Snow. Both were very severe cases of large stone, and the patients presented histories of much suffering through many years. Of *dilatation in the female, and washing out of fragments* or removal of stone entire, there were 6 cases, all recovering with no complication whatever. *Of urethral calculi* in the male, there were 4 cases, all recovering. *Of simple lithotrity* in the male, there was 1 case, followed by recoverv. *Of attempted litholapaxies, but which were not completed*, there were 4—3 ending in death, and 1, the stone hiding in a sac, later underwent perineal lithotomy and recovered. One was probably complicated with some form of *tumor of the bladder* and a history of chronic disease of the kidneys. One was a case of chronic alcoholism. One was complicated with sacculated bladder, and the last two were both cases of surgical kidney of the very gravest kind.

Of the *litholapaxies in the male*, there were 18 patients, having twenty-two operations—4 requiring a second operation. Of the number, 16 recovered and 2 died. Of the latter, one after the first, and one after the second operation.

In connection with this subject, I desire to speak of the

great difficulty I have experienced in securing such an examination of the urine as would tell just the true condition of the kidneys. Casts are very generally absent; albumen can often be traced to the presence of pus, and I am convinced that we have yet much to learn from the surgical kidney.

ART. II.—**Buffalo Lithia Spring No. 1 as a Therapeutical Agent in Practice.** By JAMES SHELTON, M. D., Formerly for twenty-seven years Resident Physician at the Buffalo Lithia Springs.

If we wish to obtain chemical compounds in the forms least damaging to the human organism and most grateful to patients—if we desire to advance preventive medicine—it is in mineral waters that we must seek the means. This aphorism has been fully verified by a professional experience of forty years with the water of Buffalo Lithia Spring No. 1. The writer has prescribed it and observed its remedial action in almost every variety of malady in which mineral waters are indicated, and the results obtained have clearly demonstrated that the distinguishing characteristic of this water is its unquestionable power as a nerve tonic and general restorative.

In view of the dependence of all physiological processes upon a normal condition of the nervous system, it is evident that its reconstituent power, apart from other valuable properties, must give this water a wide adaptation as a therapeutical agent in the long category of diseases which may be grouped together under the generic term, *derangements of the nervous system.* In gynæcological practice it has proved to be, in my hands, a remedy of remarkable efficacy—notably in *amenorrhœa*, whether the menses were partially or totally suppressed. In the deficient and painful menstruation of dysmenorrhœa *accompanied by irregularity of recurrence*, as well as in some cases of *menorrhagia*, Buffalo Lithia Water, Spring No. 1, not only alleviates the pain, but lessens the flow, causing it to re-appear at the regular intervals. It should be exhibited unhesitatingly in all catamenial disorders,

as well as, those of the ovaries frequently dependent upon uterine displacements, such as ovaralgia.

In absence of the menses, the object of treatment is not merely to cause a return of the menstrual flow, but to induce a healthful discharge of this important function by applying a remedy to the cause, which can only be done by revitalizing the enfeebled nerve cells. The nerve tonic properties of this Spring would seem strongly to indicate its use in, and to account for its action in such cases. Not unfrequently these conditions are the result of malarial influences.

Spring No. 1, has been found a potent remedy in the *cachexia* and sequelæ incident to paludal fevers, and indeed in all *chronic malarial poisoning*; and here, too, it would seem to be strongly indicated. These troubles are often associated with a severe form of dyspepsia, anorexia, nausea and vomiting. The water acts kindly in allaying this nausea, promoting the appetite in a remarkable degree, and imparting renewed activity to the whole digestive tract, thus meeting an important indication in treatment. In the mechanical derangement of *prolapsus uteri*, it relieves again by its tonic power re-establishing the general health. In leucorrhœa and anæmia, Spring No. 1 has been prescribed with marked success, being, at the same time, a very valuable remedy for women at the menopause. In neuralgia it is of uniform efficacy and has proved beneficial in *angina pectoris*, a disease closely allied to, if it be not, a true neuralgia. Its power as an aphrodisiac is unmistakable, relieving sterility in women and impotence in men in a number of cases. There is no question but that Buffalo Lithia Spring No. 1, acts as a direct stimulant to the uterus.

The conditions, however, referred to being merely symptoms of disease, in seeking for any explanation of its action in this class of cases, we must look to its power to remedy the various underlying causes. Eminent authorities class among these, atony of the nervous system, a breaking down or diminution of nerve force, resulting from imperfect nutrition of the nerve cells, which become too much exhausted to give out the vitalizing energy necessary to preserve a healthful

equilibrium of the various organs of the body and to keep them up to the normal standard.

Those cases of chronic diarrhœa occurring in my own practice, and treated by the water of Spring No. 1, were promptly arrested, although of long standing; and in the summer diarrhœa of children, its effect is energetic and permanent, its continued use preventing a return of the disease by its astringent action upon the mucous membrane of the stomach and intestines, as well as by imparting tone to their muscular coats.

From the foregoing it will be observed that the water of this Spring is indicated in all *diseases incident to dentition* whether cerebral or abdominal, in *dyspepsia in its protean forms*, in *neurasthenia* and all exhausted conditions of the nervous system. I have found it to greatly relieve acute and *chronic inflammations of the urinary passages* and bladder, principally urethritis and cystitis, allaying the sympathetic irritation of the prostate gland and constant desire to urinate. The chief value of Spring No. 1, in *syphilitic* and scrofulous affections, consists in its alterative properties, through which it removes luetic eruptions and reduces in size by resorption, glandular and strumous tumors.

In the *albuminaria of scarlet fever*, as also in *dropsical affections* whether of hepatic or cardiac origin or dependent upon renal congestion (as exists in some forms of acute and chronic nephritis, as well as in Bright's disease in the general acceptation of the term), and also in *anasarca*, the water of Spring No. 1 stimulates the kidneys to action; the quantity of urine is largely increased and the œdema diminishes correspondingly. During an epidemic of scarlet fever, albumen disappeared from the urine of those cases treated by the water, and was not at any time present in those in which it was prescribed as a preventive from the manifestation of prodromic phenomena.

Urinary analysis repeated at stated intervals will show a continued diminution in the quantity of sugar in *diabetes mellitus* and a marked decrease of diabetic puffiness. This is accompanied by a large increase in the number of red blood corpuscles. In *diseases of the skin*, such as eczema

and acne, the diuretic and alterative action of the water causes the eruption to fade, and in a few weeks to disappear altogether. My experience with this mineral water in the treatment of *intestinal obstructions* and *hepatic engorgement* has been equally gratifying; in these cases the obstructions were removed; regular and normal actions returned, the bile-clogged liver was unlocked and reduced to its proper size, as was was shown by percussion afterwards.

In bringing this paper to a close the author would state that it has been impossible to do more than outline those diseases in which he has found this remedy most serviceable. It goes without saying, that symptomatic affections allied to them—*e. g.*, jaundice in biliary affections, and gleet as a sequela to gonorrhœa—have also been successfully treated by him with Buffalo Lithia Water, Spring No. 1. And the foregoing is submitted simply as a contribution to general therapeutics gathered from his own practice and clinical observation, fully convinced that a mineral water, which has proved of such value in so many cases, merits serious consideration as a therapeutical agent in practice and as a prophylactic measure in preventive medicine.

Clinical Reports.

Two Cases of Injury to the Skull of Long Standing—Operation—Recovery—Remarks.

By J. W. BRYANT, M. D., Petersburg, Va.

CASE I.—White man, aged 58. Was seen in consultation February 15th, 1887, with Dr. C. T. Hibbett, U. S. N., lately stationed at City Point, Va. Nine years ago, he received a kick from a horse, which fractured and depressed the bones of the skull just at the union of the squamous and coronal sutures on the right side. The scalp was badly lacerated. The scalp wound was closed with a few stitches, and water dressings applied. He made a good recovery, and for a long time had no trouble, except frequent slight headaches, the pain always being more severe at the old wound.

About four years ago he thought that the sight in the

right eye began to fail, and at the same time he noticed that the headaches gradually became more frequent and severe. The trouble with his eye increased, and two years ago he put himself under the care of Dr. Joseph A. White, of Richmond, Va., for treatment. No very marked benefit resulted, and his condition gradually and steadily became worse, until the sight in the right eye was entirely lost, and the left eye also became blind. His general health began to fail; had no appetite, pain in the head so severe and constant that he could only rest when under the influence of morphine, and the co-ordinating functions of the brain were very seriously disturbed.

I found him in bed, where he would lie for hours at a time, flat on his back, without ever changing his position unless he was made to do so, when he would remain just as he was left until made to move again. His hands and feet were never still, but kept up their aimless motions unceasingly. He had no control over either bowels or bladder. When talking, the muscles of the face contracted irregularly; giving him at times a most peculiar expression. When spoken to, a flash of intelligence would sometimes pass over his features, and he would give a correct answer to questions; at other times he would either take no notice, or answer irrelevantly. His temperature was normal, pulse full and slow, 66. Skin moist and pleasant, and all excretory organs seemed to be doing full work

There was a well-marked depression at the point of injury, covering a space $1\frac{3}{4}$ by 1 inch, the principal injury being along the anterior inferior angle of the parietal bone; its posterior extremity being $2\frac{3}{4}$ inches from the upper outer angle of the orbit. Forcible pressure at the base of the depression caused severe pain in the head, and very perceptibly affected the pulse, causing it to intermit with long intervals. At that time, he could still count my fingers with the left eye.

My *diagnosis* was: long-continued compression of the brain, which was just beginning to manifest its effect upon the various functions of the organ.

The *prognosis* was very grave, only one chance presenting itself, and that a very doubtful and perhaps hazardous one: To trephine, and with the rougeure forceps remove all of the depressed bone, in the hope that the impaired organ would gradually regain its functions by permitting its proper expansion. I so advised the Doctor, and at his request, the wife and son of the man, he himself having no voice in the

matter. Dr. White was consulted by the son, and he heartily approved of the operation, and advised its immediate performance.

After some little delay, the man was brought to the Home for the Sick in Petersburg to be operated upon. Upon his arrival, I found that he had a very severe case of piles, and it was thought best to remove them before the operation on the head was done. He was accordingly etherized, and the piles ligated, Dr. S. W. Budd kindly assisting me in the operation. He took ether very well, and made a good recovery, all of the ligatures coming off in six days. During the week following the operation all of the brain symptoms were aggravated, and he was not at all conscious of his surroundings.

Ten days after the above operation he was again etherized; and, in the presence of, and assisted by, Drs. Lassiter, Budd, Hibbett and Burgess, the following operation was performed: A horse-shoe-shaped incision was made from the upper outer angle of the orbit, along over the temporal ridge, to within an inch of the right ear, and the scalp, fascia, temporal muscle and periosteum dissected back, exposing the skull over the entire line of fracture, and including enough of the uninjured frontal bone to give a firm base for the large inch trephine. The skull was then opened through the frontal bone. A second opening was made through the depressed bone with the small trephine, thus giving ample room to use the rougeure. In making this opening, the teeth to the trephine made a very small opening into one of the branches of the middle meningeal artery, and a fine, jetting stream was the result. This hæmorrhage was promptly stopped, by applying a sponge dipped in hot water. With this exception, no difficulty was encountered during the operation. All of the depressed bone was removed with the pliers. The dura mater was found to be closely adherent to the depressed bone, and was thickened and slightly granular. There was no mark of any spiculæ having been driven through into the brain; and while the inner table was very irregular there was no endostosis, the irregularities being altogether due to the fracture. The edges of the bone were rasped smooth, and the wound flushed with a hot 1 to 3000 solution of mercuric bichloride, and dusted with iodoform. The wound in the scalp was closed with deep cat-gut sutures, embracing all of the severed tissues, the only provision for drainage being six or eight strands of large catgut, slightly twisted, and laid in the lower angle of the cut. The entire wound was

then covered with iodoform, and a cotton compress and bandage applied.

After the effect of the ether passed off, there followed the most severe shock that I have ever seen follow any operation. The man gasped for breath, was pulseless, and had a pinched, bluish look about the face. This lasted some time, and was only relieved by hypodermic injections of brandy and one-fourth grain of morphine. With this exception, not a bad symptom followed; the wound healed by first intention—only a discolored splotch being on the cotton when it was removed.

From the time he recovered from the ether to the present time he has been perfectly rational, even during the severe shock, asking what had been done to him, where he was, and who had operated upon him; and for the first time in months realized his condition, and understood all that was said to him.

When he left the hospital six weeks later, with some one to lead him (for there was no improvement in his sight), he walked to the hack, and moved steadily and with ease. When last heard from (June 3d, 1887), his health was perfect, but he was still blind.

Case II.—M. W., white woman, aged 20. Eighteen months since she received a severe blow on the left parietal promontory from the round end of a ginger-ale bottle, the force being sufficient to cut to the skull, and render her unconscious for some time. I saw her a few hours after the injury, and found her suffering from severe concussion, and as there was no evidence of fracture, dressed the wound and made her as comfortable as possible. It was fully twenty hours before reaction set in, and well-marked symptoms of compression followed. The pulse, from being very weak and rapid, became full, slow and labored, the *left* pupil widely dilated, and responded only momentarily to light, and the entire *left* side was to a marked degree anæsthetic. She could not articulate perfectly, and deglutition was often very difficult.

I was at a loss to account for this train of symptoms, and called Drs. Budd and Hinton to see her with me. We decided to do what I should have done at the first visit—cut down and examine carefully for any fissure or evidence of fracture, and if necessary trephine.

This was accordingly done, Drs. Budd, Hinton and Schank

assisting, but no sign of fracture could be found. The periosteum was very much congested, and thinking that its condition might have caused some of the trouble, we did not feel justified in going further, but were in hopes that the incision would relieve the symptoms. The wound was therefore closed, the periosteum being first united with fine silk sutures which were cut short; and the scalp closed over them, and dressed with iodoform and cotton. Union by first intention resulted, and for several months all of the head symptoms were relieved.

After some time, however, the pain in the head returned, the symptoms which had so puzzled me re-appeared and gradually increased in severity, until her life became a burden to her, and she was willing to take any risk that gave a chance of permanent relief. The old cicatrix would frequently bleed, and the scalp felt raised and thickened for some distance on either side of the incision. I remembered those short silk sutures which had been left, and thought possibly they might account for some of the trouble. It was finally determined to cut down again, and unless some satisfactory cause of the trouble could be found, to trephine.

With Drs. Budd, Hinton, Hibbett, Martin and Burgess present, ether was given, and a crescent-shaped incision made, so as to avoid the old wound, and the scalp and periosteum turned back. The membrane peeled off very easily, but no trace of the silk sutures could be found. The bone was very much congested and bled very freely; the blood welling up from a dozen of small points over the site of the blow. More blood was lost from the bone than from the incision. The trephine was set, and after some difficulty, the bone being very hard, and bleeding freely, a button was removed and the cause of the trouble made evident. The outer table and diplöe were intensely inflamed, to such an extent that I think necrosis would ultimately have resulted if it had not been relieved. This proved to be the sole cause of the severe pain with which she suffered. The inner table and membranes were in a normal condition. The opening in the outer table was enlarged, and a good portion of the inflamed bone removed with the gouge. The wound was closed with catgut sutures and catgut drainage, and iodoform dressing applied. Union by first intention, and entire relief of all the symptoms followed, and now, four months after the operation, she is entirely well.

Remarks.—Both of these cases presented unusual symptoms in some respects which I think deserve special notice.

In Case I, what could have been the character of the impressions upon the brain matter, which could have followed such an injury, after so long a time, and which were so promptly relieved by an operation? I was not prepared for such prompt relief; in fact, looked upon the operation at that late day as a forlorn hope, only justifiable from the utter hopelessness of giving relief in any other way.

Again, what explanation can be given of the fact, that firm pressure upon the depressed, but firmly united bone caused the pulse to intermit as it did? That fact was not only noticed by Dr. Hibbett and myself at my first visit, but during the operation, while using the small trephine at the base of the depression, the gentleman who had charge of the pulse noticed it, and stopped me twice on that account. I expected to find cartilaginous union in some portion of the fracture, and was surprised to find hard bony union at every point.

In Case II, the train of reflex (?) symptoms which presented, so closely simulating compression, puzzled me very much before the operation, and are equally inexplicable now. Had there been compression, the symptoms should have been on the opposite side of the body, and had there been fracture by contre-coup, the base of the brain would have been injured, and would have given altogether different symptoms.

From what I have seen of injuries to the skull and brain, I am inclined to think that injury given to any one point, is not followed by the same train of symptoms with that regularity which one would be lead to expect from the rules governing cerebral localization. That part of brain matter immediately around the fissure of Rolando is considered the "noli me tangere" point, and yet I have seen a man with a piece of wood five-eighths of an inch in diameter driven through the skull and an inch into the brain at this point, and remain there a week, and upon its removal, he recovered without having one symptom of brain trouble at all. (*Va. Med. Monthly.*)

Again, in a case reported with special reference to dry iodoform dressing. (*Va. Med. Monthly*, April, 1885.) The

first symptoms arose the third day after the blow was received, and not until the fifth day were they pronounced enough to justify opening the skull in the absence of fracture. The skull was opened, however, and a large clot, external to the membrane and immediately over the fissure of Rolando, was removed, and prompt relief given. The injury in these cases, if I may be pardoned for referring to them again, with the two just reported, was over the same region of brain matter, and in no two were the symptoms at all similar. The one giving the best marked symptoms was the one with no fracture and no clot, and where the brain and membranes were perfectly normal, and the case of most severe fracture only gave any great trouble after some years, and then not according to recognized laws of localization of brain functions.

Correspondence.

Treatment of Ague and Fever—Powers & Weightman's Quinine, Old Man's Beard and Corn-Meal in Water.

Mr. Editor:—September is on us, and with us, you know, it is usually the most sickly month. A sort of ague and fever carnival occurs, as a consequence of the decaying vegetable matter. The earth is steeped around with drainings from the urn of the vegetable dead and dying, and the whole platter is leavened for action. The question is, What is best in these cases of ague and fever when they occur? Look to the many new panaseaic remedies coming from the old *cortex Peruvianus*, or put much faith in preventive science? Your humble correspondent ventures to say that by proper care and caution we have these diseases almost under command, and can prevent them in a great measure. Still, should they come,

> "Shall we despair of all that we have gained as old achievements,
> And put our trust in new?"

By no means. Many of the old things are best; and those

which have been faithful servants we will stick to. One thing—Powers & Weightman's sulphate of quinia—is better than any other preparation of the bark in these cases. But there are times when the chills, or the constitution of the patient, "go back" on the old cortex and its preparation, and it fails to put a check to this fermentation. What then? I have found by experience that the fluid extract of the *chionanthus*, or "old man's beard," as it is called, in drachm doses three or four times daily—the system being prepared by prior treatment, if necessary—will make a "ten-strike" with this subtle enemy of ours. But this medicine must be pure, and not burned, or otherwise injured in the making.

Again, if we are bothered with a persistent attack, that refuses "to down" over and over again, Lugols' solution will do well. Fowler's solution also, with tincture of iron, and the addition of a few grains of quinia sulphate to the mixture, acts nicely. I think the secret about these latter remedies is their action upon the liver and spleen, or any congested part, freeing the circulation and skin, and their general alterative effect as well.

Sometimes we butt up against "*similiar*," and again "*contraria*" crosses our way; but the truth to tell a country practitioner is, don't bother with either of the "curanturs"; all they care about is the *sure curantur*. The latter they must have, for they cannot, like many of the city doctors, send their patients away to Nature's healing waters, but must stick to them to the end,

> "And have their offerings in the victor's name,
> For they sprinkle their blood on the funeral flame.

But I have not time, nor will I crave your space to continue; and will only add that ordinary cases of ague and fever may be cured by giving a tablespoonful of pure cornmeal in half-tumbler or more of pure water every few hours. There is virtue in this in more ways than one.

Wm. S. Stoakley, M. D.

Bay View, Northampton Co., Va., August 10th, 1887.

Physical Culture in Academic Colleges, Etc.

Mr. Editor,—Will you allow me space for a few lines in your journal through which to communicate with the medical profession upon a subject which has for many years caused me much anxious thought? I refer to the *development of the physical, as a necessary part of a well-rounded education*, which should not be neglected by our young men who are soon to enter college, upon the ground that all of their time and energies must be expended in mental training, regardless of the fact that a well-stored mind will be as powerless for good when nerves and muscles fail in their functions, as it will be powerful for evil when the moral faculties have been similarly neglected.

What doctor is there of any prominence who has not every year to mortify the pride of some young man, and send sorrow and sadness to hearts of ambitious parents, by saying, "Your son must not return to school next year. If you expect him to be a man, put him in the corn-field and let him build up his weak and prematurely decaying frame." The advice is good, if the field is the only place where the remedy can be found.

To say nothing of lost time, and the growth of mental and immoral weeds that would soon check every noble aspiration, and finally choke out the capabilities of attaining to literary and scientific distinction, how much better would it be to provide for mental, moral and physical training under the direction of suitable professors, who can judge what discipline the body needs as well as the mind?

I am glad that Randolph-Macon College has taken a step in the right direction, and hope that physicians throughout the land will lend their aid and countenance to so worthy an object, by informing their friends and patrons of the importance of physical culture, *pari passu* with mental and moral; and showing them, as they easily can, to how much greater distinction their sons may rise by having the physical strength to support their mental efforts, not only while at college, but throughout their whole lives. Let the profession write and

let them work, until every college has an instructor in the gymnasium who studies the capacities of the young men and as wisely directs their training as do the professors of mathematics, and Greek and English.

Z. B. HERNDON, M. D.

Richmond, Va., August 16, 1887.

Original Translations.

From the French. By S. C. YOUNG and C. HOWARD YOUNG (of Staff of *Journal de Hygiene de Paris*, France), Hartford, Conn.

Hypodermatic Injections of Eucalyptol for Consumption.

Dr. J. Roussel, of Paris, has a good paper on this subject in a recent number of *Journal de Medicine de Paris.* He says:

The eucalyptus, introduced into France from Australia by Ramel, is a magnificent tree, which, in a few years, attains huge dimensions when set out in suitable soil, with its roots well watered and its branches not shaded.

All parts of the tree secrete abundantly a volatile active principle. When fresh, its odor is penetrating, and recalls the mixed smell of tar and camphor. This volatile principle is diffused great distances by the breezes which take it from the green leaves; it permeates the ground about the tree, and impregnates the water upon which the leaves fall.

This volatile principle is a hydro-carbonate ($C^{12}H^{20}O$), strongly oxydont (generating ozone) and antiseptic, destroying all miasms and ærial micro-organisms, developed in earth or water, with which it comes in contact. Intermittent and marshy fevers disappear wherever the eucalyptus abounds. The most unhealthy regions of Algeria, of Southern France, and the Pontine Marshes have become almost paradises since this tree was introduced in these sections. In Australia, where the tree is indigenous, the sick are placed in its shade, and there recover. Thus nature herself has proven to man that this tree is destined to be his defense against infectious organisms; that where there are poisons, there is the remedy also.

The recognition of this fact inspired Ramel with the beneficent idea of giving this inestimable treasure to Europe.

As usual, ingratitude was his only reward, and he died poor and ignored on the outskirts of Carcassonne. It will be thus a long time yet; the State is so prodigal of money and honors to those who beg for them that it has none left for those who merit them.

Pharmacy has drawn from the eucalyptus its anti-febrile, tonic and disinfecting agents. Since 1870 I have studied and employed its various products. I take the infusion of dried leaves as an agreeable drink, and think it superior to tea. I order it as a drink for an acid and fetid digestion. I use a decoction made with distilled water in bathing and in disinfecting ulcers, and for vaginal injections. I order the extract and the powder in pills for influenza, spring, autumn, and swamp fevers. Inhalations of the essence are used for coryza, respiratory troubles, whooping-cough, asthma, etc. Its fluid application for topical treatment quickly cures sores, ulceration of the neck of the uterus and vaginal blennorrhagia. From the first I observed, moreover, that the active principle is eliminated chiefly by the bronchial tubes. Whatever may be the method of administration, the breath is soon impregnated with the peculiar odor of the drug.

Moreover, the disinfectant effect upon bad wounds is shown so clearly and so quickly that long before the discovery of the microbe of pulmonary consumption, I was convinced that the wounds, left in the lungs by the dissolution of tubercles, would be healthfully modified if the pulmonary tissue could be soaked and, so to speak, dressed by the eucalyptus inhalations; but the administration of pills made from the extract, or of capsules containing the active principle cannot be taken continuously in sufficient doses, as they are irritating to the mucous membrane of the stomach. Since then I have persistently sought a way to administer the preparations of eucalyptus subcutaneously. Solutions of the extract made with distilled water can be injected, but they produce only an insignificant and temporary effect on the breath. The essence, on the contrary, injected under the skin, diffuses in the blood current its volatile substance, which, aided by the warmth of the body, seeks to escape by the lungs.

At first, I was stopped by the very severe pain which the injection of the essence produced. At the third prick in the same limb the pain became intolerable, and was followed by redness, swelling, and inflammation of the skin, but without signs of suppuration, because the essence is antiseptic. I made these first trials upon myself.

I noticed at the Exposition of Vienna, in 1873, a eucalyptol made by several distillations, which had a taste milder and sweeter than that of other essences. Several subcutaneous injections made on myself proved painless. Time and rest produce a molecular change in this essence. It divides into two almost equal strata. The lower one is cloudy and opaline, while the upper one is transparent and of a pale-yellow color. I decanted the liquid and collected the limpid part. When more than fifteen years old, its essence precipitates a bitter and very acid resin, which I have eliminated by filtration; it is so thoroughly mollified that the injection is scarcely felt, and slight massage of the cellular tissue is sufficient to dispel the impression produced under the skin. Women and delicate girls, even during a prolonged treatment, do not think of changing the side to receive the injections made three times a week. I have never observed any local accident, not even a redness after a series of injections applied in the same place.

If the dose is a little too large, it produces general excitement, elevation of temperature, and slight headache, and at the same time a slight insufficient respiration, due to a too great quantity of the active principle retained in the pulmonary cells. This slight malaise lasts scarcely an hour, and disappears as the vapors are expelled from the lungs. I have observed no other notable phenomena in any organ. Medium doses produce generally anti-spasmodic, anti-catarrhal, anti febrile, and tonic effects.

These researches were made with an essence distilled in 1870, its caustic resin having been eliminated by natural oxidation. When new essences are purified of their resin by some chemical means of oxidation or electrization analogous to that of the rectification of alcohols, this treatment, which I applied hypodermatically, became perfectly practical and remedial.

The primordial qualities which proclaim eucalyptol as the best medical antiseptic, and which, above all, specify it as the antiseptic for the lungs, are:

1. The fact that is pointed out to us by nature herself, who utilizes it just as it is created in the living plant, to disinfect unhealthy sections. The growing cinchona is not a febrifuge in itself, and man has to torture and kill it in order to extract from it its riches.

2. Being a natural product, and not an artificial composition, the essence pre-exists in nature in the leaves of the eucalyptus plant. Expression or simple distillation only is necessary to extract it in all its purity.

3. Being a vegetable product, organic, more like a human organism, it is more manageable, more assimilable, than chemical antiseptics, or those drawn from the mineral kingdom, such as salts of mercury, boric acid, carbolic acid, etc.

4. It permeates the body without producing any poisonous effect, without corroding or altering the living tissue, while chemical antiseptics are all corrosive, alterative poisons, the administration of which can only be tolerated in small doses, of which the dangers are too well known.

5. Lastly, the quality which specially makes eucalyptol a lung medicine is its transformation in the body to vapor or gas in its natural state, which contains all the virtues of the plant, and which, according to the physical law of vapors, tends to diffuse in the place where the least resistance is offered, seeking the shortest route to reach the air. So that the natural channel of expulsion of eucalyptol is just the organ upon which we wish to act—viz., the lungs; while the non-volatile antiseptic agents are eliminated very little, or not at all, by the lungs.

After experimenting on the size of the doses necessary, I have adopted the following treatment, which I have employed for four years on many consumptives, during all stages of the disease and in all its forms, with very little variation for the age, or for the state of the invalid:—I make, during the first week, an injection each day of 0.20 to 0.30 gramme of eucalyptol; then I continue regularly every other day; then three times a week an injection of 0.30 to 0.40 gramme, and so on till I reach 0.80—a dose which it is rarely necessary to exceed, although it can be increased to more than a gramme without injury to the patient. Although it is exceedingly painful, the essence ought to be injected completely under the skin, so that the needle shall not bring the essence in contact with the wounded capillaries. I consider the hip the best place for injection.

Three or four minutes after the injection, the patient perceives the characteristic odor in the mouth and nose; a little later those present also perceive it. At first, the odor remains for five or six hours, and after the second week it does not leave, or at least it appears during the fits of coughing necessary for the expulsion of the sputa. The spittle itself tastes of eucalyptus instead of fetid—of purulence.

The microscopic examination of the sputa is very encouraging to the sick and interesting to the doctor. It shows the true and rapid influence of the treatment upon the morbid secretions of the lungs. After the sixth or tenth injec-

tions, my patients say to me, "I spit much better this morning. The sputa is no longer green, grey, or rusty, but pale-yellow or white; it is no longer heavy or glutinous, but fluid and frothy. It is spittle-like; detached more easily in the morning, and is more abundant while the lungs are being cleaned out. I have spit only once or twice on waking, and a few times during the day. At the same time, the violent, painful coughing necessary for the expectoration of the discharge accumulated during the night in my throat has disappeared. I have no longer the disagreeable fetid taste which came in my mouth, and which, accompanied by violent fits of coughing so regularly, made me vomit. I have much less soreness in the throat and ear; I swallow easily, and I have a good appetite. I have already gained nearly a pound. I breathe much better, and sleep all night. I work, and go up stairs easily. I am very well satisfied, and have great confidence in this treatment."

All my patients tell of their excellent sleep, increase of appetite, and perfect digestion. From this time the doctor ascertains the first signs of amelioration; the sputa of the patient, formerly very abundant, and formed of characteristic matter, purulent, grey, greenish, or brown, is much less in quantity. The spittoon seems to contain saliva in which one no longer sees more than a little abnormal sputa, diminishing each day in quantity and density.

The microscopical examination of the sputa is the keystone of pulmonary tuberculosis. It has been shown that the bacilli of Koch do not exist in the expectorations of a healthy lung, or in a simple inflammation, cold, bronchial pneumonia, suppurating perhaps, but not infectious; but that it exists in the infectious suppurative disease, called tuberculosis, that this bacillus breeds and propagates to a state of perfection in culture, sterile to other germs, reproduced upon the inoculated patient, a tuberculosis identical to that of the sick person from whom are procured the seeds for culture, there is no doubt.

The bacillus is, then, the pathological proof of tubercular consumption. The result of microscopical examination of sputa, taken before, during and after treatment, and also observations of several special micrographists of private and hospital laboratories, are so astonishing that I dare affirm nothing before having it based upon several hundred observations.

Before the treatment with eucalyptol injections, the sputa of twenty confirmed phthisical patients, at several stages

of the disease, swarmed with the characteristic microbe of Koch. After thirty or so injections, it became necessary to search in the expectorated matter in the morning to find some scattered bacilli, all of which show soft and irregular forms, appearing to have lost their vitality under the influence of the eucalyptol vapors. And after two or two and a half months of treatment, all the microscopic examinations are negative, and show that the rare sputa obtained is absolutely exempt from bacilli. The purulent globules and the epithelial cells, which were present in excessive numbers in the first examination, are still frequent in the second research, and the small number of bacilli seen at this stage indicate that the pulmonary suppuration tends to asepsia. On the third examination, the pus globules are extremely rare, and their early disappearance proves the entire disinfection of the lung.

These last globules of pus are analogous to those found under the antiseptic dressing of external wounds; like them, they are followed by the secretion of simple serum, which signalizes cicatrization in a barren soil.

The medical antisepticism of ulceration of the lung is then probable. The clinical examination accords in all points with the microscopic examination. I have had no case of laryngeal phlegmon apart from phlegmon of the lungs. When not inherited, accidental, or contagious, it is probable that tuberculosis commences in the larynx first, where the external infectious agents can collect without being swept out, as they would be, from the mouth, nasal passages, and pharynx, by the normal salivary secretions, or swallowed with the food. The mucous membrane of the larynx aud bronchial tubes being constantly perforated by temporary ulcerations, offer to external microbes, by the thousand, a port of entry. The bacilli of tuberculous sputa, on leaving the lungs and catching on to the vocal folds of the larynx, penetrate the laryngeal muscles, producing phlegmon of the larynx consecutive to pulmonary phthisis. The cessation of laryngeal symptoms, pain, loss of voice, softening of the mucous membrane and ulceration is produced before cicatrization of the lung, and by the same treatment, which is to be expected, since these disorders appear in the narrow canal where all the aseptic vapors of the eucalyptol, seeking to escape in the atmosphere, are concentrated; consequently each of these weak spots of the larynx is bathed in a greater quantity of vapor than each of the tubercles disseminated in the lungs.

In some subjects, who have been cured for a long time, there is no sign of bacilli in the expectorations, and no pain in the larynx; but the voice remains thick and hoarse. This is due to the fatty degeneration of the laryngeal muscles and tensors of the vocal cords, produced by tuberculosis, and which effect survives a long time, while the destroyed muscular fibrin is reconstructed slowly.

Diarrhœa and tubercular enteritis, which so often accompany pulmonary phthisis, are caused by swallowing the sputa, in which the bacilli emigrate throughout the intestinal tract, causing ulceration of the mucous membrane.

The healing up of these spots, and the disappearance of certain pains in the joints, thoracic and abdominal organs, permits me to hope that the antiseptic action of eucalyptol, circulating in a fluid form in the blood current, may destroy also the colonies of bacilli lodged both in organs deeply situated and in the bones and joints. I have patients at all periods of treatment. Two treated four years ago have never coughed since; two others had colds in winter, but were quickly cured by eucalyptol; others treated two years ago have not coughed yet. All these patients have resumed an appearance of most perfect health. I have several times since examined their expectorations, without finding any traces of bacilli. I have under treatment a goodly number of hereditary tubercular patients who have no traces of bacilli, but globules of pus and epithelial cells. I am certain that in a few weeks their expectorations will be normal.

These cases are particularly interesting as showing that pulmonary phthisis may be transformed into simple bronchopneumonia. I have now under treatment, in hospital and in private practice, patients who had long ago arrived at the last period. Their present tenacity of life astonishes observers.

Medical antiseptic treatment will never be complete until it is also preventive, and I believe that I have rendered important service to the brothers, wives and guardians of my patients. I do this without frightening them by reference to possible contagion, and simply under pretext of giving tone to their systems. I believe that this simple and easy precaution is not without importance to those in attendance on the sick, and that it will have great importance in cases of epidemics. If microbes have already become lodged in the bronchial or intestinal tubes, they will be destroyed by the antiseptic agent; and in any case these parts thus sterilized will be proof against contagion.

As an accessory to the eucalyptol, I use, in very small quantities, by hypodermic injections, pilocarpine and cocaine against laryngeal, ulcerative complications, antipyrine and atropine against hyperthemia and sweats; ergotine and hemoglobine against hemoptysis; iron, arsenic and gold against dyspepsia, chloro-anæmia, and amenorrhœa; sulphur against bronchial and scrofulous adenopathia; paraldehyde against neuralgia and pleuritic pains produced by adhesions. The stomach is entirely restored to normal alimentation. I have no need to use nutritive subterfuges, because the appetite soon becomes so great that the patients soon double their quantities of food. These facts have been verified by several hospital doctors having clinical and civil practice, and upon selected patients for observation.

Analyses, Selections, etc.

The New Local Anæsthetic—Stenocarpin.

We call the attention of our readers to the new local anæsthetic, stenocarpin, which has just been introduced to the notice of the profession by Dr. John Herbert Claiborne, Jr., Instructor in Ophthalmology in the New York Polyclinic, Attending Surgeon to the Northwestern Dispensary, Eye, Ear and Throat Department—a son of one of the ex-Presidents and Honorary Fellow of the Medical Society of Virginia, Dr. John Herbert Claiborne, of Petersburg, Va. Dr. Claiborne, Jr., after patient and ingenious experiment, has arrived at the conclusion that this new agent may fairly be esteemed as a rival of cocaine, whose usefulness and possibilities have continuously grown since its first appearance before the medical world.

We had intended to have given a synopsis of Dr. Claiborne's paper, which appeared in the *Medical Record* of July 30th, but his style bears so little condensation—a compliment which cannot be paid to every writer—that we have determined to give the article in full.

During the past fall, Mr. M. Goodman, V. S., in travelling through West Feliciana Parish, La., had occasion to apply a poultice to the fetlock of one of his horses. Having none of the customary means at hand with which to make it, he raked together a number of leaves from the ground, and having sat-

urated them with hot water, applied the mass as a poultice to the inflamed part. After the swelling had arrived at the proper condition, he made a free incision into the part without the horse giving any evidence of pain. It occurred to him that the leaves might have anæsthetic properties; and a few weeks after, having occasion to open an inflamed bursa on the elbow of another horse, he made a similar poultice, applied it as before, and again made the incision without any pain to the animal.

Dr. Allen M. Seward, of Bergen Point, N. J., having obtained, through Mr. Goodman, some of the leaves, made an analysis of them. He found a number of constituents, among them an alkaloid; and having excluded all others as the anæsthetizing element, concluded that this virtue lay in the alkaloid. He made a two per cent. solution of the alkaloid, and settled the point by obtaining local anæsthesia in a cat's eye with several drops.

Mr. Goodman informs me that the tree is known in the locality mentioned as the Tear Blanket Tree. It grows to the height of 35 to 40 feet, with a diameter to the bole of about 18 inches, and a spread of foliage of about 30 to 35 feet. The leaves resemble those of an acacia. The bark is smooth. From the ground up, the tree is furnished with clumps of forked spines or thorns, the parent spine springing at right angles from the bough or trunk. Though Mr. Goodman is a native of the region, he has never seen the tree blossom. As fruit it bears pods 8 or 10 inches in length, flat and slightly curved, containing seeds and a viscid juice. The spines are very tough and highly polished, and the wood is extremely tough. It grows in clumps and singly, and is abundant in Louisiana.

From the likeness of the tree to the acacia stenocarpo, Dr. Seward dubbed the new alkaloid *stenocarpin*. It would have been better, however, to withhold the naming of the alkaloid until the botanical name of the tree had been known.

Through the kindness of Dr. Seward, I was put into possession of two drachms of a two per cent. solution of the alkaloid. The results obtained under its use are appended below.

On the afternoon of June 25th, two drops of an aqueous solution of the alkaloid were instilled into the eye of a rabbit. In *five minutes* there was insensibility of the cornea and conjunctiva, palpebral and bulbar, so that the corneal epithelium could be abraded, and the conjunctiva seized and

twisted with forceps without any evidence of pain or sensation from the rabbit. In *ten minutes* there was the same insensibility, with slight dilatation of the pupil. The palpebral fissure seemed wider than at first. In *fifteen minutes* the palpebral fissure was markedly widened, the insensibility was the same, the dilatation of the pupil increased. In *twenty minutes* the dilatation of the pupil was *ad maximum*, the anæsthesia the same; no change in the width of the palpebral fissure. At the end of *forty minutes* there was slight sensibility of the conjunctiva, but complete anæsthesia of the cornea. Dilatation still *ad maximum*, and width of palpebral fissure same.

Throughout the period of observation—that is, after anæsthesia was established—the cornea presented the same dry, glazed appearance as is observed in cocaine anæsthesia.

In *thirty-six hours* after the last observation, the dilatation of the pupil was still *ad maximum*, the anæsthesia had entirely disappeared, and the palbebral fissure was normal in width. No blanching of the conjunctiva was observed at any time.

Two drops were placed also on the inner surface of one of the animal's ears, and in ten minutes the surface of the ear covered by the drops could be pierced by a scalpel without a cry or movement from the animal. Multiple punctures in the surrounding tissue elicited abundant evidence of pain.

As no untoward symptom appeared at the end of two days, I suggested to my friend, Dr. Allis, of Plainfield, N. J., to allow me to put some into one of his eyes. Without any urging on my part, and with a praiseworthy devotion to science, he allowed me.

June 27th.—Three drops of the above-mentioned solution were instilled into his left eye. He complained that they stung a little. Immediately afterward there was slight lachrymation. *Five minutes:* Anæsthesia of cornea and conjunctiva complete; reaction of pupil to light, normal; no dilatation; palpebral fissure increased slightly. The doctor complains that there is a "stiff" sensation in the lids. *Eight minutes:* Punctum proximum, 5 inches. States that the lids feel less stiff, but says that the eye-ball feels fuller than before. *Ten minutes:* Anæsthesia still complete; palpebral fissure markedly increased; no appreciable difference between the pupils. *Thirteen minutes:* P. P., 5 inches. *Fifteen minutes:* Anæsthesia same; width of palpebral fissure same; left pupil slightly larger than the right; reaction to light, direct, accommodative, and consensual, normal; pupil

seems to be wider from above, and outward, downward, and inward; conjunctiva seems slightly paler. *Eighteen minutes:* P. P., 5 inches. *Twenty minutes:* Anæsthesia of cornea and conjunctiva *not* complete; touching with a strabismus hook gives slight pricking sensation. Dilatation increased; reaction to light, direct, accommodative, and consensual. Does not complain of any blurring of the vision. *Twenty-three minutes:* P. P., 6 inches. *Twenty-five minutes:* Anæsthesia and width of fissure same as last recorded; dilatation of pupil almost *ad maximum.* *Twenty-eight minutes:* P. P., 7 inches. *Thirty minutes:* Anæsthesia abolished; left pupil dilated *ad maximum* and uniform; *neither* direct, consensual, *nor* accommodative reaction can be seen. *Right* pupil contracted to pin-head size, and somewhat irregular; no difference between the tension of the two eyes can be detected. Although the right pupil is contracted, it reacts to light, directly, in accommodation and consensually. No systemic effect. Pulse 80. *Thirty-three minutes:* P. P., 7½ inches. *Sixty minutes:* Palpebral fissure less than at the last recording; dilatation of pupil still *ad maximum* and uniform; reaction of pupil to light, direct, accommodative, and consensual, faint. P. P., 9 inches.

In the afternoon of the same day, the doctor said he was not able to read at all with the left eye; right eye unaffected.

June 28th, 4 P. M.—P. P., 12 inches; dilatation about medium; palpebral fissure normal; the three reactions of the pupil to the light, faint.

June 19th.—P. P., 8 inches; pupil slightly dilated; reaction to light, marked. And on the 30th the pupil was normal, with P. P. at 5 inches.

At no time was there any unpleasant symptom, so that the doctor had no occasion to regret his immolation to science.

In the days following the above experiments, a number of *foreign bodies were removed* from the corneæ of patients, *invariably without pain.* Usually two drops sufficed; but in one case, in which the cornea was considerably inflamed, four drops were necessary to cause complete anæsthesia. Whenever the conjunctiva was deeply inflamed, it always retained a certain amount of sensibility, which seemed to be in direct proportion to the dignity of the inflammation. Under no condition did the cornea fail to become perfectly anæsthetized to the spud. When the insensibility was wearing off, we invariably noticed that the conjunctiva became sensitive before the cornea.

In several cases, where more than several drops were instilled, the dilatation was alarmingly great—in fact, the merest rim of iris being visible. As far as we know, however, the pupils returned in time to their normal sizes.

A number of cases of *conjunctivitis simplex* were treated with it also. We invariably noticed some constriction of the vessels, but which by no means approached that caused by cocaine. It was the uniform verdict of the patients that their eyes felt better and clearer after its use.

In two cases of *iritis*, where the iris was tightly bound down, great effect was observed from only two drops. In one case of trachomatous pannus, the pupil was not dilated *ad max.* at the end of an hour, although six or seven drops had been instilled.

We observed *irregular dilatation of the pupil* in three cases besides Dr. Allis'; one patient, however, had, in the eye treated, partial atrophy of the optic nerve; in this same case we also observed irregular contraction of the pupil in the untouched eye, but not to the pin-head size.

With a view to ascertaining the effect of the drug on the *mucous membrane of the nose*, my friend, Dr. L. P. Walker, of this city, painted the solution on the mucous membrane covering my right turbinated bone. In ten minutes I was not able to feel the pressure of the probe at all, and had I had my eyes shut, would not have known that he had touched it. Contact of the probe with parts where the solution had not been placed, settled beyond a cavil the correctness of my observation. The doctor told me he observed a slight blanching, but no contraction to speak of. This might be explained by the fact that only very little of the solution was used.

Dr. Walker also placed into my right *ear*, at my suggestion, four or five drops of the solution. At the end of twenty minutes a probe was allowed to rest upon the drum; at first there was only tactile sensation, but after a few seconds there was slight pain.

Having waited ten minutes more, he touched the drum in various places. I cannot say that there was pain then, but certainly there was the very unpleasant sensation which one has from striking the drum gently with some blunt instrument. At my request, he then touched the drum of my other ear, in which there had been nothing put. The sensation was almost the same, but I think I can conscientiously say that the drum on which the solution had rested was slightly less sensitive than the other. No unpleasant symptom was

caused other than a slight deafness from the presence of the fluid on the drum. This passed away as soon as the fluid was allowed to trickle out.

With reference to its anæsthetic effect *on the skin*, Dr. Seward had informed me that he removed, under its influence, a wart from a young lady's face by cauterization with the pernitrate of mercury, without any pain. Having saturated a thin piece of absorbent cotton with the two per cent. solution of the drug, I placed it on the anterior aspect of my left forearm. At the end of twenty minutes the skin could be pricked with a scalpel without any sensation. In ten minutes more I made an incision of one-half inch in length in the area which had been covered by the drug. In passing through the cuticle, there was the faintest sensation; having passed this, there was absolutely no sensation. I placed several drops of the solution in the wound, and continued to dissect, I think, about as far down as the thick fascia, without any sensation, save the grating of the knife against the connective tissue.

In further proof of the anæsthetic effect on the skin, I submit the following:

An Irishman of 50 years presented himself at the Northwestern Dispensary with otitis media catarrh. acuta. I observed a *sebaceous tumor on his forehead*, between the hair and the left eye. I suggested to him to have it removed, telling him that I thought it could be taken away without any pain. He consented. A thin piece of cotton was saturated with the solution and tucked over the tumor and its vicinity; in twenty minutes the skin could be pricked without any pain. In ten minutes more I made a long horizontal incision across the tumor, dissected the skin from around the sac down to the bone, and removed it *in toto*. The man sat perfectly still, and said nothing during the whole operation, save at one point, where I made a deep sweep into the connective tissue; he merely observed it scratched a little. Several drops of the solution were immediately instilled in the neighborhood, and in a few seconds I continued to the end without another word from him. When asked if it hurt, he said he had often been hurt worse by the scratch of a pin. Passing of suture caused no pain, and the wound, dressed antiseptically, healed by first intention. The patient seemed very much surprised when I showed him the tumor, and expressed himself as dumbfounded,

I have made no experiments on the physiological effect of the drug when introduced into the general system. It should

be borne in mind that only a limited quantity of a two per cent. solution was used in the above experiments.

From analogy, it would be reasonable to expect that the anæsthetic effect would be increased by stronger solutions. In its effect upon the eye, it seems to stand midway between atropine and cocaine. Its anæsthetic effect lasts about as long as that of cocaine; its mydriatic effect is greater than that of atropine, while its paralyzing effect on the muscles of accommodation is perhaps as great as that of atropine, reaching its maximum effect in about six or seven hours, and disappearing rapidly thereafter. It would seem to be indicated wherever cocaine is, so far as its anæsthetic properties are concerned, and where atropine is, so far as its mydriatic properties are concerned. In fact, for irides rendered sluggish by inflammation, it seems to be superior to atropine, though the duration of its effects, as we have seen, is by no means as great. In Dr. Allis' case I was not able to detect any difference in tension, even when the pupil was dilated *ad maximum.*

After examining a number of eyes at the same time, I may confidently say that in seven instances I have observed a *diminution* in tension when the pupil was dilated *ad maximum*, though I have not been able to detect it in all cases. If this property can be settled beyond a doubt, it will truly possess a phenomenal characteristic of peculiar interest with reference to *glaucoma.* The contraction of the opposite pupil, though it has not been observed in all cases, was marked in several, particularly in Dr. Allis'.

From the foregoing observations, its therapeutic value in eye diseases cannot be inconsiderable.

There is no reason to assume that it will not cause anæsthesia of all mucous surfaces, as it has been shown to do in the eye and nose. In view of the results obtained by myself, I feel safe in predicting for it a wide field of usefulness in all departments of surgery where local anæsthesia is desired, and it only remains for further experiment to develop all its possibilities. It may fairly be reckoned as a rival of cocaine.

Dr. Seward informs me that the winter leaves yield seven and a half grains of the alkaloid to every ten pounds, while the summer ones yield only five grains to every ten pounds. The supply of the alkaloid is very small at present, and the price very high. An ounce of a two per cent. solution costs $6, which would give 60 cents as the cost per grain. These figures remind one strongly of the market value of cocaine soon after its introduction.

Two Laparotomies on Same Patient Ten Months Apart—Both Ovaries and Mesenteric Tumor Removed—Silk-Ligature Nucleus of Vesical Calculus.

Dr. R. A. Kinloch, of Charleston, S. C., reports this case (*Trans. S. C. Med. Ass'n*, 1887). Mrs. N., aged 28. Had had puerperal fever. Tumor began about a year previous. Pregnancy occurred, and the pressure of the pregnant uterus divided the tumor in such a way as to feel like a saddle-bag-full on each side and thin in the middle. Tumor was a large cystoma of left ovary. Labor was normal in October, 1885. Successful ovariotomy was done January 7th, 1886. Patient had no serious after symptom, and in three weeks was walking about. There were several extensive adhesions to intestines, mesentery and parieties.

Early in July, patient complained of cystitis. Palliatives were given without material benefit. During September, while urinating, she experienced great difficulty and pain, and suddenly a conical calculus fell into the chamber. At its apex are seen the braided ends of the braided silk suture used in tying the pedicle of the tumor in the ovariotomy; the calculus around it is phosphatic. How the silk got from the abdominal cavity into the bladder is a matter of pure conjecture, for there was not the slightest reason to believe the bladder was punctured during the operation. Dr. T. Gaillard Thomas says he learned from the family physician in charge of one of his cases of ovariotomy that a ligature was discharged by the bladder.

This same lady had another tumor developing in the abdomen which Dr. Kinloch supposed was a cystoma of the right ovary. He opened the abdomen November 20th, through the line of the old incision. The mesentery was attached to the tumor just about where he had ligated this structure in the former operation. These supposed adhesions were spread out fan-like upon the outer cyst wall, and when traced backwards were resolvable into three very large veins, round and fully distended. He applied two silk ligatures, by transfixing the tissues, to each vein, and then encircled the three veins, together with the mesenteric tissue *en masse* with the free ends of one of the proximal ligatures; the other ligatures were cut close to the loops. The vascular mesenteric structure was cut between the ligatures, and a portion left attached to the cyst walls. He next punctured the cystic growth with Emmet's large trocar to try to reduce its size. This availed but little, as the interior cysts were small and

their contents viscid. She was then turned upon her side, and the tumor freely cut with a scalpel, which enabled him to begin its delivery through the abdominal wound which was below the umbilicus. As the tumor began to emerge, he passed his hand in to get at the supposed pedicle, when suddenly the whole mass tumbled out on the table. The tumor was of the mesentery, and the tissue which he had in the beginning ligated and divided constituted the sole attachment. The right ovary, showing signs of beginning cystic disease, was removed. In suturing the parietal wound, he included the pedicle, which, as said, was made up of enlarged veins and mesenteric structure in the wound. He transfixed this with a large steel needle, wrapped the end of the needle in iodoformed cotton, and dressed the wound with the same. Patient was about in three weeks. The tumor presented no evidence of malignity. The patient has been perfectly well ever since, but has not menstruated.

Penetrating Gun-Shot Wound of Cranium—Recovery.

Dr. Jas. Evans, Darlington, S. C., reports the case (*Trans. S. C. Med. Ass'n*, 1887). Last September, B., aged 15, received a pistol ball (buck shot) wound while looking down the barrel. The ball entered just to right of centre line of forehead and an inch above eyebrow. He was taken up from where he fell apparently lifeless. Reaction took place after hot and mustard applications to extremities and administration of digitalis. His intellect became clear, giving intelligent answers, and complaining of dull pain in the head. Expression became natural, with deviation of tongue or impairment of muscles of the extremities. A probe, without any force as he lay on his back, entered 2½ inches, downward and backward; and if pushed much further, would have impinged on the vault of the cranium, just anterior to the coronal suture. The ball not being felt, no attempt was made to extract it. But spiculæ were removed; the wound was cleansed with solution of permanganate of potash, and closed with a pledget of carbolized cotton, held in place with a bandage. Take chloral, gr. v, and potassium bromide, gr. xv, every three hours until sleep is induced, and apply cold water to head. Dr. E. Miller, the family physician, took charge then. He did well until about fifth day, when high fever and active delirium set in. Dressings removed and a drachm of bloody serum was discharged, which at once gave great relief; but slight paralysis of right lower extremity set in, and the right upper extremity became involved the

next day. Given aconite and calomel. Fever until twelfth day, when paralysis also became better, and entirely disappeared a week later. The wound in meantime had stopped discharging and was nearly healed. He is now as strong as he ever was, and with the exception of being more subject to headaches than he was would not feel that he had received an injury. The part of the brain injured is plainly the anterior lobe. The ball remains in the brain—most probably, encysted.

Punctured Wound between Dorsal Vertebræ, Penetrating Spinal Cord Membranes.

Dr. J. H. David, Little Rock, S. C. (*Trans. S. C. Med. Ass'n*, 1887) was called to a boy, aged 14, stabbed in the back while his body was bent forward, with a barlow knife, about 1½ inch from middle of spinous processes of 5th and 6th vertebræ—the wound being downwards and inwards. The probe, without force, passed to a depth of over an inch. He fell at once, with entire loss of motion in the lower extremities, and movement of either leg gave pain; hæmorrhage considerable. The edges of the wound were brought together with adhesive straps. Retention of urine the next day, and bowels inactive. Thin serous fluid oozes from the wound. On the next day, paresis of both lower extremities complete, but no muscular twitching; sensation impaired, but pain on moving legs. After an unsuccessful attempt to introduce catheter, he voided a large quantity of urine. Dr. N. Y. Alford in consultation, coincided in the diagnosis of penetration of the membranes of the spinal cord. Applied light compress over wound. After this, enemata were given; urine drawn a few times; purgatives occasionally; compress kept up. Tincture of nux nomica was prescribed. In a week the serous discharge from the wound ceased, pain in legs became less, and paralysis also improved, and he steadily grew better. Nearly four weeks elapsed before his natural feelings were restored. He finally entirely recovered, and is now in perfect health.

Tobacco Amblyopia.

Dr. Geo. Howe, of Columbia, S. C., after reporting two cases (*Trans. S. C. Med. Ass'n*, 1887), raises the question as to whether there is or not a true amblyopia from the use of tobacco. Both of them were also drinkers. He quotes numerous authorities to show that it is not so much tobacco that causes amblyopia or amaurosis as it is alcoholic drinks.

In Turkey, where smoking is the habit, amaurosis is rare. Minor, to test the matter in some cases, interdicted alcoholic drinks, but allowed his patients to continue the use of tobacco, and they got well. Dr. Howe is disposed to give alcohol the credit of bringing about this impairment of vision rather than tobacco. All of his cases have been drinkers as well as smokers. His treatment is abstinence from both, and beginning on $\frac{1}{32}$nd grain of sulphate of strychnia, gradually increasing until signs of its physiological action are seen.

Rupture of Eye-Ball—Vision Restored.

Dr. J. C. McMillan, of Marion, S. C., reports the case (*Trans. S. C. Med. Ass'n*, 1887) of a boy, aged 4 years, who fell upon a rusty nail, rupturing his eye; a large amount of vitreous humor exuded; the eye was shrunken in appearance, and of course sight was lost. As far as possible, on arrival an hour after the accident, all the vitreous was replaced with a scoop and probe; the wound was sutured, and adhesive plaster was applied to prevent further exudation. A cold compress and a light bandage was then applied, with directions to make cold applications during the night. Examined three days later. Wound healed by first intention; globe of eye regained normal shape. Only faint streaks of blood seen with ophthalmoscope in vitreous body, showing that a good deal had become absorbed or organized. Two days later, vision began to re-appear. Atropine had been used four times. Ten days after accident, the vitreous humor was perfectly transparent, and vision was perfectly restored. This was a year ago. So far there has not been any further trouble whatever about the eye or sight.

Case of Ainhum in South Carolina of about Fifty Years' Duration.

Ainhum is exceedingly rare in the United States. This case, which Dr. James Evans, of Darlington, S. C., reports in the recent *Transactions of the South Carolina Medical Association*, is a negro man, tall, muscular, age 74, healthy, performs unusual amount of work, for one of his years, on a farm. The left little toe was encircled by a deep sulcus, almost completely severing it from the foot, leaving it attached by a fibrous band, not larger than a large-sized straw. Distal extremity is globular; nail curved and stunted, semi-elastic and warm; has no sensibility; impossible to detect bone in its substance. Proximal end is round, cuticle much

thickened, and puckered like a toe amputated by circular method. There is no bone near the end, but by firm pressure a disk of bone could be felt at the metatarsal joint, rendering intact that articulation. No sign of ulceration. Subsequent to this time, on pulling off his shoe the toe dropped out of the shoe when he held it up, the separation having occurred without his knowledge. He stated his attention was first directed to a painful condition of the toe when quite a young man, attributed to a tight-fitting shoe. He, however, noticed *then* a slight furrow in his toe, which gradually deepened as years rolled on; so the disease was in progress for fifty years. Most of the time there was little pain or inconvenience. The greater number of authors state that it is very slow in its progress, and six or eight years is its usual period, and there is no mention of having extended over an interval as long as this case. The pathology of this affection is involved in much obscurity. The history of this case would lend support to the view that it is caused by some trophic disturbance of the nerve supplying the part, which has been excited into action by the irritation produced by a thorn and tight shoe.

Ether and Chloroform in Surgery.

Dr. A. B. Miles, of New Orleans, publishes an excellent article (*N. O. Med. and Surg. Jour.*, August, 1887), reviewing the uses and relative merits of each of these agents, that is well worth a full notice. Too commonly is it the case that an entire community uses ether or chloroform according to the dictum of the ruling professional spirit of that community. Again, fashion brings to the front first one and then the other. Nations even have their predilections. The French and Germans, with some exceptions, prefer chloroform. The British are about equally divided. While ether is used in the hospitals of Naples, most of the other Italian provinces use chloroform. In the United States ether is the popular anæsthetic North, while chloroform is more used in the South.

Ether is the weaker anæsthetic, possessing less toxicity than chloroform. It stimulates the cerebrum and the vital functions over which the medulla oblongata presides; in this action it is more uniform than chloroform, and thus removes a primary danger. In those who take ether well, the heart and lungs are stimulated throughout the anæsthesia. Yet in the latter stages of etherization, the vital reflexes may be powerfully depressed, but gradually, thus warning of danger,

by the labored, stertorous, irregular breathing and cyanosis. In 10 of 40 well authenticated ether deaths, however, the heart failed first—resembling chloroform. So the comparative safety of ether and its timely admonition of danger are its chief advantages. Among its dangers and disadvantages are its inflammability, disagreeable odor, irritating effect on mucous membranes, etc., causing coughing, strangling, resistance, catarrhal bronchitis and pneumonia. Rectal etherization had to be abandoned because of its producing diarrhœa, dysentery, hæmorrhage, collapse and death. When inhaled, it also causes an excessive secretion of bronchial mucus, making it especially dangerous in children and old people.

The plan of "forced etherization" is the one usually practised. It consists in overcoming the patient with assistants and "crowding" him with ether so as to asphyxiate as well as to anæsthetize him. While the dangers of this method are not so great as with chloroform, still they must be obvious. It risks over-distension of the right ventricle with venous blood, and making it powerless. Beside the immediate danger of asphyxia, among the remote dangers is that of pneumonia produced by the obstructed pulmonary circulation. There is also the danger of nephritis, as pointed out by Emmet, in proportion to the amount of ether taken; hence the introduction of the forced method so as to use the minimum amount of ether. The blood changes of prolonged etherization are not conducive to healing of wounds. It also is more apt to provoke nausea and vomiting.

Chloroform is non-inflammable, more agreeable to inhale, less irritating and more enduring in anæsthetic effects; it excites less mucous secretion, is easier of administration, is more energetic, and is specifically anæsthetic. The primary cerebral excitement is less than that of ether, and requires less saturation of the system. It is comparatively free from disastrous sequelæ. But its dangers are immediate. Nearly 50 per cent. of deaths from chloroform occur in the outset of its administration. Its dangers are paralysis of the heart and also of respiratory organs. This suddenness teaches the necessity of gradual administration of chloroform. Irregularities of circulation or of respiration should be taken as admonitions. Irregular strength of pulse-beats is specially ominous. Hesitating irregular respirations are scarcely less ominous. In about 25 per cent. of deaths by chloroform, death resulted from disturbances of respiration. These ir-

regularities are mostly found in the anæmic and weakly and in those under the influence of depressing emotions.

The *methods of administration* modify the dangers of anæsthetics. As to *ether*, let the lungs be well supplied with air so as to lessen the dangers of asphyxia; at the same time let air inhaled be well charged with the vapor of ether. As for *chloroform*, agents should be given in advance to stimulate the vital reflexes and prepare the nerve centres for coming anæsthetic effect. Whiskey toddies are objectionable. If given immediately before the chloroform, it is not absorbed in time; if given in time for absorption, the alcohol antagonizes the anæsthetic. Alcoholic patients are difficult to anæsthetize, and when anæsthetized they often show alarming symptoms. The maximum good, with the least harm, follows its hypodermatic use, or given by inhalation at the outset of anæsthesia. It is well to mix the first whiffs of chloroform with the vapor of alcohol. But better still are a few breaths of ammonia in advance of the chloroform.

"Mixed anæsthesia" by a hypodermic of morphia sulphate ($\frac{1}{12}$ to $\frac{1}{6}$ grain) alone, or combined with atropia sulphate ($\frac{1}{200}$th to $\frac{1}{150}$th grain) is useful. Atropine acts particularly well in bronchial catarrh, pulmonary diseases, and whenever a respiratory stimulant is required. The morphine secures the desired primary stimulant effect, and subsequently acts as an anodyne. A safe way to prepare the centres for chloroform is to stimulate them primarily with ether inhalations.

Coughing early in chloroform anæsthesia indicates overdosage. Begin chloroform in minimum doses—a few drops—and gradually increase as needed. The administrator should attend strictly to his business—constantly watching the pulse, respirations, etc. Haste in administration of chloroform deserves nothing but condemnation. It is unwise to advise the patient to "take long breaths" at the beginning of chloroform administration. Do not overdose during the calm which follows the primary excitement. It is better now and then to give the patient a rest in order to refresh the residual air in the lungs.

After a review of statistics, Dr. Miles concludes that chloroform, carefully administered, with attention to the precautions named, is as safe as ether administered as it usually is in America. But the unskilful use of chloroform and inattention to the warnings are fraught with so much more danger than etherization by the usual method that he prefers ether in the surgery of adults whenever its use is not contraindicated.

To sum up, in adults, begin and continue anæsthesia with *ether* unless contraindicated by such things as pulmonary or renal inflammations, violent excitement and local evidences of excessive irritation of the respiratory surfaces. In all quick operations that can be performed during primary anæsthesia, ether is preferable. Ether is preferable in anæmia, in extreme nervous prostration, in cardiac diseases and degenerations, and especially where the heart's feebleness is shown by irregular strength of beats, as in hearts exhausted by overwork, dilated hearts of regurgitation, hearts of convalescents from chronic diseases, etc. *Chloroform is permissible* in over-action of heart due to compensatory hypertrophy—especially if associated with nephritis; in all heart diseases and deformities if the organ functions well. It is *preferable* in pulmonary affections. *Ether is contraindicated* in these cases. In nephritis, *chloroform is preferable.* Bright's diseases *contraindicate* both, especially ether.

When ether fails to produce anæsthesia, give chloroform. Ether in these cases prepares the way for chloroform.

Chloroform is preferable in childhood. In the aged and infirm it is usually best to begin with ether and continue with chloroform. Chloroform less frequently than ether causes vomiting, so that in all cases where obstinate retching after an operation might endanger life, chloroform is preferable.

Meningocele.

Dr. Thomas Hebert, of New Iberia, La., contributes some suggestions on this subject (*N. O. Med. and Surg. Jour.*, August, 1887). The mode of origin of these tumors will mostly determine their nature. In a given case the presence of brain, etc., in the protruding sac will largely depend upon the amount of space allowed for the exit of the underlying organ. These tumors are mostly in the lower occipital region. If they occur through a suture, the contents are likely to be fluid, and the coverings, dura mater and arachnoid with subcutaneous tissue. When meningocele protrudes through some other space, is congenital, or develops after birth, it is a matter of importance to know whether or not brain membranes cover the tumor. He reports the case of a female child, seen two days after birth, who had a cystic fluid tumor below the lobe of the left ear, and just behind the ramus of the left lower jaw, about as large as a small hen-egg; also several enlarged sensitive glands behind the tumor. The tumor was translucent, flaccid, and reducible. When the

fluid was pressed back, the pupils would dilate, eyelids opened widely, and the face and cries expressed suffering. If it had a neck or pedicle, it was evidently deep in the spheno-maxillary fossa. Turning the child head downwards, the tumor would bulge and become tense. Some tissue bands across the fundus divided the tumor into two protuberances, which offered evidences of intercommunication. Pressure pads of lint and iodine were applied, and codliver oil was given to correct scrofulous taint. Five months later, the tumor had become larger, and its fluid was poured out beneath the deep fascia of the neck, and by gravitation had infiltrated the whole side and anterior portion of sub-fascial connective tissue below the larynx. Œdema glottidis caused urgent dyspnœa, and cyanosis. As the head was thrown back to the right side on the pillow, there was seen a bulging about the parietal eminences, and the vertex elongated, suggesting hydrocephalus. Hydragogue cathartic gave purely temporary relief—the œdema quickly returning. He punctured, with a slim blade, outside of the sac, slightly to the left of the median line, towards the lower border of the larynx. This puncture was carried beyond the deep fascia until the knife touched the thyroid or cricoid cartilage. Half an ounce of clear limpid fluid followed the withdrawal of the knife. Shock was so great that collapse threatened. When reaction was finally established, the dyspnœa was considerably relieved, and entirely disappeared in a few days. A similar opening was made on the right side of the trachea, below the first where suppurative inflammation of the lymphatic glands was indicated. Clear, limpid, albuminous fluid escaped, giving place shortly to sanious, flocculent, scrofulous pus. A third incision below and to right of first on the left side of the neck gave relief, and in a few days began to discharge pus. Aspiration of the tumor itself revealed the same kind of clear, limpid fluid as that which had infiltrated the anterior and lateral sub-fascial areolar tissue.

After the cervical swelling had nearly disappeared, the cyst began to re-fill, and in a day or two became tense, and symptoms of brain pressure developed. Frequent aspirations were made with a hypodermic syringe—at first, three or four times daily. After 30 or 40 aspirations, the amount of fluid diminished, and finally ceased. Towards the end of these aspirations, pure pus took the place of the clear fluid. Here then was complete obliteration of the sac by repeated punctures. But in about five weeks later, the symptoms returned, and death resulted. Dr. Hebert thinks the history

of this case suggests that it may be possible to devise an operation for the permanent cnre of meningocele—the principle being subcutaneous drainage into the cellular tissue.

Carbolic Acid Poisoning—Death by Tetanous on Seventh Day.

In the service of Dr. H. DeMahy, of New Orleans, La. (*N. O. Med. and Surg. Jour.*, Aug., 1887), an Irishman, aged 36, while drunk, by mistake for whiskey, drank an unknown quantity of crude carbolic acid, May 27th. While being ambulanced to Charity Hospital, he was given, hypodermically, atropine, gr. $\frac{1}{120}$, apormorphia, gr. $\frac{1}{10}$, and tincture digitalis, minims xv; and by mouth, liq. calcis saccharat. At the Hospital, the syphon tube was used to wash out the stomach, using first warm water and then sweet oil. Tenderness and pain in epigastrium, and he became frightened and restless. Morphia, hypodermically, and crushed ice by mouth freely. Throat only whitened in spots. Sweet oil, sweet milk, mucilaginous drinks and morphia occasionally during night. Morning of 28th, great epigastric pain and tenderness, frequent violent retching, bursting headache, injected eyes, scanty and rather painful bloody-colored urination—only ℥viij since admission; effects of whiskey about over; odor of the acid still in breath. Continued morphia, ice, and olive oil. Also

℞. Bismuth subnitrat..... ℥j
Tinct. opii..... ℥j
Mucilag.....q. s. ℥vj.—M.
S: Tablespoonful every half hour.

On 29th, somewhat better, but still epigastric pain and occasional retching. Urine only ℥xj in 36 hours. Treatment continued.

On 31st, urine still high-colored and scanty, but he was otherwise better until afternoon of June 1st, when he became excited; could not open mouth; pain back of neck; right arm numb. At night, symptoms intensified. Potassium bromide and choral every four hours. Midnight, worse. Gave morphia, gr. $\frac{1}{8}$th, every two hours. On 2d, opisthotonos, teeth clenched, dysphagia, pharyngeal and thoracic spasms. At 10 P. M., died in a violent convulsion.

Strangulated Inguinal Hernia Operation.

Dr. R. H. Day, of Baton Rouge, La., reports (*N. O. Med. and Surg. Jour.*, Aug., 1887) a successful operation he performed in 1850—the anæsthetic being about two ounces of whiskey and thirty drops of laudanum.

Bergeon's Gaseous Enemata—Cases.

Dr. F. W. Parham, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, Aug., 1887) the results of some of his experiences with Bergeon's gaseous enemata treatment. Cases of incipient phthisis, without marked temperature elevation, promise most from this treatment, but he had no such cases. Sulphuretted hydrogen probably acts as an antiseptic; hence it may be inferred that Bergeon's treatment acts best in cases marked by suppurative and necrotic processes. The notes given of eight phthisical cases under Dr. Parham's charge, in which Bergeon's treatment was used, do not hold out any material encouragement, except in very rare instances.

Nearly 150 Lumbricoid Worms Passed by a Child.

In the service of Dr. Charbonnet, a colored child, aged 5 years, who had a ravenous appetite, was continually picking at his nose. etc., was given at bedtime a mixture of four grains each of santonin and calomel, followed by castor oil in the morning. He passed about a quart of round or lumbricoid worms, of average length of from 9 to 15 inches, and their number was 145.—*N. O. Med. and Surg. Jour.*, Aug., 1887.

Resemblance of Perinephritic Abscess to Typhoid Fever.

Dr. A. J. Banker, of Columbus, Ind., reports a case of perinephritic abscess (*Progress*, July, 1887—the July number being received August 17th),—which leads him to remark that the pulse, temperature, condition of tongue, delirium, and pain in the head and back, with the mental condition of the patient, are calculated to mislead unless the previous history of the case and a careful inspection of the body be made. In lumbar abscess the pain is much the same, but we lack the general severity of the symptoms. The swelling becomes apparent much sooner, and the pain is not so deep seated, and does not produce so much general disturbance of the system.

Spontaneous Origin of Diphtheria and Typhoid Fever.

The graduation thesis of Dr. J. M. Wellford (*N. O. Med. and Surg. Jour.*, Aug., 1887) advocates the doctrine that both typhoid fever and diphtheria may be spontaneously originated; or, in other words, that there are conditions in which these diseases may arise *de novo* without the transmission of the specific pioson from pre-existing cases.

Congenital Fatty Deformity of Leg—Operation—Relief.

Dr. W. R. Rogers, of Memphis, Tenn., reports the case (*Miss. Val. Med. Monthly*, August, 1887,) of Miss M., aged 20; no history of heredity nor "maternal impression." General health good; well developed. Right thumb and little finger have each only one phalanx; index and ring fingers have each a phalanx and a half; middle finger has only a three-fourths phalanx. All fingers webbed; only little finger has a rudimentary nail. Left hand very similarly deformed. Left lower extremity was normal in parts and development.

Right lower extremity much deformed. There was congenital equino-varus. Has not used foot since 7 years old, and is not more than three-fourths the size of other foot. When about 7 years old she had fever, and after convalescence, used a crutch. But this leg is one third larger than the left. Skin for lower two thirds is unhealthy, and about one-fourth of this area has been occupied about four years by two large ulcers, with callous borders, and red and smooth surfaces. Four inches above knee is a constriction as if a two-inch band had been tightly tied around the limb, although the extensor muscles retained considerable power, and the hamstrings flexed the leg with decided force. Above and below the constriction, circumference of limb was 17 inches, while just at the constriction it was only 9 inches. Knee-joint movable, but she was unable to move ankle joint or any of foot-joints. Skin about knee-joint and half-way up to the thigh was thickened and looked a little like elephantiasis. Advised amputation. Operation June 3d, three inches below knee, under thorough antiseptic rules. Wound had nearly healed July 3d, and she went home. Dissection of amputated leg showed not a vestige of muscular tissue in it except in popliteus muscles. There was complete fatty degeneration of the leg muscles. A sat-

isfactory theory for the several constrictions in different parts cannot be arrived at.

Comparative Action of Antipyrin and Antifebrin.

Dr. J. T. Altman thinks (*Miss. Vall. Med. Monthly*, Aug., 1887,) antifebrin will take the place of antipyrin, aconite, veratrum viride, etc. Average dose in pill or capsules, grs. viij to x every hour or two—lengthening intervals as the temperature falls. He summarizes conclusions arrived at from the study of its action in 24 cases of typhoid fever in Massachusetts General Hospital:

1. Both antipyrin and antifebrin have a remarkable power of reducing temperature in typhoid fever.
2. In no case was their use followed by any unfavorable effects upon the course of the disease.
3. General condition of patient was more comfortable after taking them, often followed by refreshing sleep.
4. They seem to have no specific effect upon the course or issue of the disease, but indirectly promote the safety of the patient by contributing to his comfort.
5. By the internal use of these remedies all the effects which are claimed for the treatment of typhoid fever by the cold bath, are readily obtained without the trouble and inconvenience of the latter method, and without exposing the patient to the dangers of exhaustion and shock consequent on removal of the patient from bed.
6. These remedies may be given to the youngest patient without danger in suitable doses; indeed, the beneficial effects are more decided, and unfavorable consequences less observed than with adults. [Yet Dr. Alex. H. Weir, of Staunton, Va., reports in *Medical News* that in a few minutes after giving a lady with headache 3½ grains of antipyrin, she had suffused eyes, roaring in ears, burning sensations over neck and face, and cardiac depression and respiration—in fact, threatened collapse, requiring diffusible stimulants, etc. We quote this note from *Maryland Med. Jour.*, Aug. 27, 1887.]

House Fly Communicates Disease.

Dr. M. Moore, of Scranton, Miss., believes (*South Med. Rec.*, August, 1887), the common house fly is a great distributor of every epidemic—even of small pox, yellow fever and many so called infectious diseases.

Man an Object of Zoology.

Dr. S. W. Stiles, of Georgia, gives a very superficial paper on this subject in *Southern Medical Record*, August, 1887.

Laryngitis—its Cause, Sequelæ and Treatment.

Dr. J. G. Orvis, of Seymour, Ind., has a paper on this subject in *Progress*, July 1887. After reviewing the anatomy of the larynx, he remarks upon the inflammation of the nasal and pharyngeal cavities with hypertrophy of the middle or inferior turbinated bones, generally blocking up the passages and turning the secretions from their natural passages. This perverted or septic secretion inflames whatever tissues it touches. Cold, exposure to night air, dust inhalations, etc., are only sub-agents. In short, chronic and sub-acute laryngitis are almost always products of hypertrophied rhinitis. As subjective symptoms there are hoarseness, soreness, tendency to cough with muco purulent expectoration, dysphonia, dysphagia, etc. As objective symptoms, the laryngeal lining is congested, perhaps ulcerated, distorted epiglotis, enlarged veins which show plainly on vocal cords. Cervical glands swell, and pain develops in the lower cervical and supra-clavicular region, with sore chest due to coughing, etc.

Acute laryngitis is almost always fatal. The sequelæ may be phthisis, œdema of glottis, stiffening of vocal cords, dysphonia or partial aphonia, dysphagia, and rarely enchondroma, trachoma of the cords, and epithelioma.

As to treatment, at first apply to the diseased larynx with camel's hair pencil, Dobell's solution, followed by solution of nitrate of silver, (gr. v. to water ℥j. at first, made slightly stronger at each subsequent sitting every other day.) This gives great relief but does not cure. Remembering that the cause of the disease is hypertrophy of tissues over turbinated bones, etc., remove the diseased structure with scissors, caustics or electrodes. He considers electricity dangerous, as it causes too great cicatrix [but not in expert hands.] He prefers excision. The best caustics are nitric and chromic acids. Of course cocaine precedes any of these plans to relieve pain.

Puerperal Thrombosis and Embolism of Pulmonary Arteries.

Dr. R. A. Patterson, of Aurelian Springs, N. C., reports (*N. C. Med. Jour.*, Aug., 1887,) four cases which have come under his observation within a few years. One recovered; 3 died. The attacks came on from 15 hours to several days after labor. Symptoms, painful dyspnœa, rapid and thready pulse, respirations likewise rapid, compelled to sit up. One died suddenly as soon as she laid down.

Electrolysis in Urethral Stricture and Gleet.

Dr. J. W. Overall, of Memphis, Tenn., says (*Miss. Val. Med. Monthly*, Aug., 1887), that for electrolysis, any good battery will do. Never interrupt the current while applying it; to avoid this use a current selector. See that the battery poles are correct, as it is easy to get them reversed. Test the poles by dissolving some iodide of potash in a bowl of water; then insert the two poles. Iodine will go to the positive pole. The hard, firm stricture with little tenderness is much easier to treat—although the calibre may be almost entirely closed—by electrolysis than the soft, tender, congested stricture that easily bleeds.

Gleet and soft stricture are treated in the same way. First pass a soft bougie to determine the nature of the stricture. If soft, tender and irritable, neutralize acridity of urine, then pass soft bougie alternate days until irritation is somewhat allayed, and then every day for three or four days; then pass metallic sound for three or four days until tenderness lessens and hæmorrhage ceases. Then attach an olive-point, about same size as last sound, to urethral electrode and attach to negative pole of battery; put positive pole in patient's hand; pass (negative) electrode per urethram to the stricture or tender spot. Bring one, two and three volts into the circuit, and wait a few minutes to see if a slight stinging sensation is caused. After two or three minutes, with electrode *gently* against the stricture, it usually passes through, if not much obstruction. When the slight stinging is felt, the current should not be longer than three or four minutes. If the current is applied to the first stricture three or four minutes *without pain*, it can be applied to the second the same length of time unless it causes pain. *Whenever* it gives pain, break the circuit by taking off a cell at a time with a current selector, and withdraw the electrode. If three volts are felt but little, increase the current one at a time until it is felt. If not felt within five or six volts, something is wrong with the connections. The patient can go about two or three days, when soft bougie should be thereafter introduced daily until the next seance. Some slight tenderness always follows seance. When tenderness subsides in four or five days, or longer, repeat electrolysis. After the second or third application, there is great relief, and the strictures begin to disappear as well as the gleet. Pass a sound daily for a month or so. Use electrolysis whenever any indurated or tender spots are noticed.

In *hard, firm strictures*, with little or no tenderness, no pre-

liminary treatment is required. Apply current in same way, but stronger from eight to twelve volts, and longer—from ten to fifteen minutes. Let seven or eight days elapse between seances. Two or three treatments usually cure permanently.

The electrolytic treatment is without danger; urethrotomy is not. Fewer failures follow the electrolytic treatment than the cutting.

Vaginal Enterocele—Successful Operation.

Dr. Frank H. Tucker, of San Augustine, Texas, reports the case (*Daniel's Tex. Med. Jour.*, August, 1887). Woman, 28 years old, 7 months pregnant, jumped from a wagon, felt something give way, walked some hundreds of yards, and then noticed a mass at the vulva. She was put to bed, and tumor disappeared, but re-appeared on sitting up. The mass came down behind and to right of uterus and bladder. Reduced and kept patient on back until some time after normal labor in July. Operation in November. Placed her in Sims' position on inclined plane, head down. Incised through Sims' speculum over tumor down to the ring of the hernia; reduced tumor; assistants held intestines in place by rods of whalebone. Then brought the ring together in a double fold and stitched straight across the fold with a continuous suture, leaving a big flap below the sutures to slough; then removed a piece of vagina a little larger than the protruded tumor over the hernia; then ligated around the circular opening, and drew the ends together like an old-fashioned work bag, until a very small circular opening was left, through which a drainage tube was inserted. Absorbent cotton dipped in boro-glycerine was packed around the tube. The operation was unsatisfactorily performed, as the peritoneum had been wounded, which produced violent pelvic peritonitis. On twelfth day, he opened a pelvic abscess that pointed in Douglas' cul-de sac, and also a labial abscess. The cavities were daily washed out with mercuric bichloride solution 1 to 4,000. Improvement began and patient was *cured* in three months.

Professional Labor and its Reward

Is the title of a high-pitched, poetic quotation, sort of "annual address, delivered before the Gibson county Medical Society," by Dr. H. W. Stilwell, of Humboldt, Tenn. It urges the principle: "Learn to labor and to wait."—*Miss. Val. Med. Monthly*, Aug. 1887.

"Heel Fly" in a Child.

Dr. G. W. Christian, of Burnet, Texas (*Daniel's Tex. Med. Jour.*, August, 1887), tells of a boy, six years old, having chills and fever irregularly. He was bloated, but no dropsy; complexion sallow; bowels irregular; tongue coated brown; transient pains and stiffness in joints. No medicine relieved this stiffness. Finally this pain became most intense, and mostly limited to the back. "A swelling" (no statement is made as to location) was taken for a boil, and was not differentiated until "a grub, known here as the heel fly," made its exit, followed by perfect health. The Doctor thinks that the eggs were deposited on some part of his body, and thence on his hands, which he conveyed to his mouth. He may have caught the fly and got the eggs on his hands in that way. This is the third case of the kind that has occurred within his knowledge.

Maggots in Nose and Throat.

Dr. F. A. Schmitt, of Schulenberg, Texas (*Daniel's Texas Med. Jour.*, August, 1887), was called to a youth, aged 18, who had just vomited two live maggots. He was now comatose, with pulse 140, temperature 104°, and bloody serum oozing from nose. He had had left facial neuralgia. The tonsils and uvula were œdematous and inflamed, and the soft palate bulged out, covering the last molar. He inserted a female catheter into the nostril to near the posterior nares, and forcibly blew through it about a drachm of calomel as near the worms as possible. (Except in the title, the writer does not say where they were.) The instrument was then passed into the posterior nares through the mouth, behind the soft palate, and calomel was blown into nasal cavity in this way also. In a fit of coughing and sneezing an hour later three worms were expelled; a few minutes afterwards, twenty; and within two hours 187 maggots in all were discharged. The boy at once regained consciousness. A mixture of quinine in water was injected into the nasal cavities every hour. By the time of calling on him the next day, 84 more worms were discharged by the mouth and nose; several were found in the bedding, and a number were evacuated by the bowels. The patient was convalescing nicely.

A High Amputation of the Thigh.

In 1839, Dr. R. H. Day, of Baton Rouge, La., records (*Daniel's Tex. Med. Jour.*, August, 1887) as "A Country Doctor's First Case of Surgery," which report is of purely personal and historic interest.

Acute Catarrhal and Purulent Otitis Media.

Dr. D. A. Thompson, of Indianapolis, Ind., says (*South-Western Med. Gaz.*, Aug., 1887,) nearly every case of simple earache is primarily acute catarrhal otitis media. Children are more liable to it than adults. Exanthemata are the most frequent cause in children, and colds in adults. In children, teething, pertussis, and such sports as diving, etc., are frequent causes. Large doses of quinine and salicylic acid sometimes produce it. Subjective symptoms vary in intensity from simple stuffy feeling to intense pain—being more severe at first in the suppurative form. In the catarrhal form, the pain is worse at night, is usually of a darting character from one ear to the throat and *vice versa*, aggravated by pressure over and around the tragus. The causes of this pain are (1) a difference in the air pressure within and without the tympanic cavity, for the Eustachian tube has become impervious: and (2) hence the secretions are locked up and are pressing against all of the tissues. In the first stages, the drum-head and ossicles are driven in against the promontory by the normal air pressure from without, and this explains also the sense of fulness about the parts. Tinnitus is usually present—due to the same cause. Hardness of hearing is a result also. The chief of objective symptoms are retracted membrana tympani—absence of line of light—slight injection of blood-vessels of the membrane, especially along the handle of the malleus, Shrapnell's membrane and periphery; malleus very sharply defined, and stands out in bold relief. After tympanic cavity becomes filled with secretion, the membrane usually bulges, color is dull, line of light is absent, malleus hard to define, and the injection much more marked. Naso-pharynx is usually highly inflamed—especially about the mouth of Eustachian tube. This tube is closed by swelling. Usually no marked fever; but if the suppurative form develops it is marked by chill, quickly followed by fever, and then brain symptoms may become alarming.

Treatment generally successful of catarrhal form. It should be predominantly antiphlogistic. One to six leeches over and around tragus are first to be used. Hot fomentations or injections of hot water are serviceable. In milder cases, a few drops of warm 4 per cent. solution of cocaine muriate, dropped in ear, affords instant relief. A few drops in the ear of a warm solution of morphia and atropia ($\overline{aa}$ gr. j to ℥j) is also serviceable. Never drop anything cold in ear. Sometimes warm breath or hot tobacco smoke into the external opening gives temporary relief. Blisters are not ad-

visable. Poultices macerate the membrana tympani, hastens suppuration, and cause a jagged rupture which does not heal so easily as the clean cut of paracentesis. One must be an adept to use scarification of the drum. Tap when the membrane is bulging greatly—preferably in the lower posterior quadrant to secure good drainage. Never inflate Eustachian tube in first stage—before rupture has taken place. But after rupture or paracentesis, it is a great relief, and helps to drain the tympanum. If the mastoid cells become involved, as marked by redness, boggyness and tenderness of skin, etc., if fomentations do not readily relieve, make a free incision down to the bone, and with an exploratory drill enter the cells. If pus comes, then trephine and drain freely under antiseptic precautions. Sometimes enveloping the neck with a warm poultice, and using a gargle, as of saturated solution of chlorate of potash, relieve pharyngeal complications.

As to *suppurative otitis media*, meningitis is a grave complication which sometimes follows mastoiditis, or extends along nerve sheaths, etc. The treatment of suppurative otitis media should be even more vigorous than in catarrhal form. Use saline cathartics, along with leeches, fomentations, etc.; bromides, chloral, alcoholic extract of aconite (gr. $\frac{1}{10}$ to $\frac{1}{8}$ every half hour) to relieve pain, to reduce fever, etc. Before rupture, lukewarm-water injections are palliative. After rupture, gentle syringing twice a day to wash out pus and prevent adhesions of membrane to promontory is necessary. Astringents are not applicable in the acute stages, but are valuable later on. Impalpable boracic acid, alum, resorcin and tannin are favorite *dry* treatment remedies; but sometimes we have to resort to solutions, such as zinc, copper sulphate, alcohol, etc. Nitrate of silver applied to edges of ruptured membrane induces repair. As a rule, thoroughly cleanse and dry the parts before making applications.

Urethral Contractions with Prostatic Disturbances.

Dr. Henry Orendorf, of Louisville, Ky., says (*South-Western Med. Gaz.*, Aug., 1887,) (1) *congenital contractions* are usually in meatus, ranging from a pin-hole to 30 French, and may cause no inconvenience until the first urethritis. As this inflammation subsides, the plastic material, irritated by urination, develops a gleet with an irritable stricture. After cure, even non-infectious coitic embrace may bring back the inflammation and discharge. Alcoholic indulgences

may do the same. (2) *Contractions from excessive masturbation* occur at meatus and in spongy portion, ranging from 1 to 5 in number, and as a rule, the prostate gland becomes hypertrophied and hypersensitive, thus narrowing the urethra. (3) *Contractions due to urethritis* gradually grading into gleet, involve one or more points in the urethra. Recurrent claps are stricture organizers. In gleet, one or more contractions are discovered. (4) Contractions are sometimes caused by *chemical* traumatism, such as mineral injections, etc. (5) When any of these conditions occur, urination is interfered with by lessening the stream and coition is interfered with by incompetency. The hypersensitiveness of the prostate causes reflex spasms, etc., and hence pains in spermatic cord, in epididymis, and even testicle. It interferes with peristaltic action of bowels, causing constipation, indigestion, etc. In short, it acts as a continuous peripheral disturber. (6) Examinations by curved sound sometimes cause urethritis. But with the urethra-meter no such bad results follow. Cocaine injections may be used before examining. (7) When behind a meatic contraction, one or more contractions are found. To determine whether these are organic or spasmodic, make the first division at the most anterior contraction, as this division removes peripheral irritation upon which posterior spasmodic contractions often depend, but if organic the strictures remain. (8) *Treatment of organic contractions.*—Modify or remove irritation; then divide the contraction. (9) *Cocaine* is anæsthetic and hæmostatic. After division, when more than meatic, when necessary, insert and retain a Nélaton catheter, give non-irritant diuretic, sterilize urine with phenol and hot-water injections. (10) Discard the steel and nickel-plated sound in after dilatation.

Preventive Treatment of Puerperal Convulsions.

Dr. F. W. Ritter, Mayock, N. C., urges (*N. C. Med. Jour.*, Aug., 1887,) the necessity of attending to those states presented by pregnant women indicating albuminous urine. Although albuminous urine may not always be followed by convulsions, experience has proven it to be a threatening condition. Treat the albuminuria as soon as it develops—two or three months before labor. Always relieve a loaded rectum by enema, and distended bladder by catheter. When evident symptoms of albuminuria present, the Doctor prescribes benzo-salicylate of lithia, grs. ij–v, with fresh hydrangea (of Lambert Pharmacal Co.), ʒss, every four hours, or according to the intensity of the symptoms; also move the

bowels two or three times daily with confection of senna—especially when malaria is present as a complication. Podophyllin and extract of taraxacum are excellent chologogues; if anæmic, give also dilute nitro-muriatic acid with muriated tincture of iron and compound tincture of cinchona. Glycerine counteracts the astringency of the iron. While this treatment does not cure Bright's disease, in nearly every instance it will relieve the albuminous urine of pregnancy. Dry friction over the kidneys with coarse towels or a Turkish bath twice a week will prove valuable adjuvants. In multipara, with large abdominal walls, a well-fitting abdominal supporter [ante-partum bandage as described by Dr. H. V. Gray in August No., 1887, of *Va. Med. Monthly*] is a desideratum. He then reports four cases in his practice to show the *general*, although not universal, dependence of eclampsia upon pre-existing albuminuria—with or without material dropsy.

Retinal Glioma—Convulsions—Extirpation of Eye—Death.

Dr. Thos. F. Wood, of Wilmington, N C., reports (*N. C. Med. Jour.*, Aug., 1887,) the case of an anæmic boy 4 years old for eye trouble, which he took to be glaucoma. Upper lid, though under control of patient, looked like ptosis. Globe hard, but not stony hard. Anterior chamber had reflex of glaucoma. Great constitutional disturbance. When 18 months old, sudden pain in eye struck the child while at play "as if snuff in the eye," but nothing foreign could be seen. Pain soon passed off. About two years later, the left eye had a peculiar appearance in it—there was a small clear spot in it. Six months later, the child was brought to the Doctor in a buggy. Shortly after arrival, a violent convulsion set in. Dr. W. J. H. Bellamy was called in consultation two hours later. Child in coma; lips cyanotic, and covered with frothy saliva; complexion cadaveric; pulse small and rapid; breathing labored; mouth temperature, 99° F.; upper left lid perceptibly prominent; hæmorrhagic stain lower edge of sclerotic. Death seemed threatened by pressure of the globe. Extirpation decided on. Chloroform attempted, but had to be discontinued on account of irregular breathing. Artificial respiration had to be kept up during operation. After the extirpation, breathing improved and became normal in a few hours. The justice of the operation on therapeutic grounds was thus demonstrated. The orbit refilled a few months afterwards, and the growth was removed. The cavity was well filled with chloride of zinc

paste, but the fatal ending was delayed only a few months—the parents not allowing any further efforts to destroy the growth.

Prevention of Communicable Diseases.

Dr. J. N. M'Cormack, of Bowling Green, Ky., says that in their order of importance to his State (*S. W. Med. Gaz.*, Aug., 1887,) as indicated by the sickness and death-rate, the communicable diseases against which constant, intelligent methods of prevention should be directed are: Consumption, typhoid fever, dysentery, diphtheria, scarlet fever, measles, whooping cough, small pox, cholera and yellow fever. Cleanliness in its broadest sense—pure air, pure water and pure soil—is the keystone of prevention. The contagia of several of these diseases are micro-organisms or "disease-germs." Practical sanitation attempts to accomplish its purposes either (1) by preventing or removing the conditions of filth which furnish a necessary nidus for the development of many of these organisms, and which may even originate some forms of them; and (2) by disinfecting the sick-room, thus destroying all infectious material. Fire is the most reliable of all methods of disinfecting discharges from nose, throat and lungs. Such discharges should be received directly on paper or cloths, and immediately burned. Soiled mattresses, feather beds, pillows and like articles, when infected, should be destroyed by fire. Boiling for half an hour will destroy all known disease germs, and this should be resorted to for clothing as soon as removed. Or the clothing should be put in one of the following disinfecting solutions: (1) Chloride of lime ℥iv, water, cong. j—M. One quart should be used to disinfect each discharge or vomiting in cholera, typhoid fever and dysentery. Mix well, and leave in the vessel at least an hour. (2) Corrosive sublimate and potash permanganate ā ā ℥ij, water, cong. j—M. It has no other advantage over the first than that it is odorless. Its disadvantages are that it is poisonous, more expensive, cannot be kept in metal cans, etc., and requires four hours to disinfect. (3) Superheated steam is practicable only in hospitals.

The sick-room should be in top story, most isolated part of the house, and the largest and best ventilated room, stripped of carpeting and hangings, with open fire-place. Prepare such a room or disinfect it after sickness by burning sulphur in it with windows down and doors closed. The paper concludes with a number of special directions as to the

specific diseases named, simply applying the principles above laid down to the individual needs.

Disease of the Mastoid Cells.

Dr. S. E Munford, of Princeton, Ind., reports (*Progress*, July, 1887) a case which doubtless began as otitis media with subsequent implication of the mastoid cells and intracranial tissues. Dr. Mussey, of Cincinnati, trephined; pus welled up in the track of the instrument, but he stopped short of penetrating the cranial cavity. The man died afterterwards. Dr. Banker, since then, always feels concerned about middle-ear inflammations, and carefully watches all cases where the mastoid integument becomes boggy. Such cases should be incised through the periosteum down to the mastoid portion of the bone behind the ear. In the early part of the disease, before boggyness begins, use leeches and poultices. If pain persists, and the integument is swollen, red and doughy, incise from the base of this protuberance to the point, *through the periosteum.* Examine carefully for dead bone and sinuses leading to the air spaces. Pack with iodoform gauze to keep wound open. If pain is not speedily relieved, lay open the mastoid cells with gouge or drill.

Fatal Hæmorrhage from Mouth in Infant Nine Days Old having Stomatitis Parasitica.

Dr. Rudolph Menger, of San Antonio, reports the case (*Daniel's Texas Med. Jour.*, August, 1887). He was called to the nine days' old infant, July 9th, bleeding profusely, especially from the tongue; bleeding spots were also along the gums and upper palate. Buccal surfaces appeared roughened as if by corroding acid or lye. Ice, ergot catechu, etc., did not stop the bleeding; the abdomen became hot and tympanitic. Death little after midnight. Patches of brownish granular curdy substance were found, at autopsy, adherent to the mucous membrane of mouth, gums and palate. A thick, red-brown, spongy, bloody substance covered the tongue. Œsophagus was nodulated with deposits of oidium albicans.

Irrigating the Ear.

Dr. H. E. Stroud of Colorado, says (*South Med. Record*, Aug., 1887), hot water thrown into the ear with a syringe relieves pain due to rupture of the membrana tympani—using the fountain syringe io as to keep up the constant supply of *hot* water at even temperature.

Hamamelis Virginica for Hæmaturic and Vesical Tenesmus.

Dr. N. D. Gaddy, of Lovett, Ind., prescribes witch hazel for the relief of *vesical tenesmus* and for the cure of *hæmaturia*, with as much confidence as he does quinine for intermittent fever (*South-Western Med. Gaz.*, Aug., 1887). He uses fluid extract of hamamelis Virginica in ʒss–ʒj doses every three hours until relief results, and then the dose is continued three times daily for awhile—until no sign of blood can be found in the urine, and every vestige of dysuria has passed off. The remedy acts doubtless on the walls of the venous system. The tannin it contains also gives it pronounced styptic properties. It stimulates the arterial system—even causing disagreeable throbbing, with headache and a sensation of fullness, etc., which may continue several hours.

Dr. Shoemaker claims it to be the remedy *par excellence* in all forms of *gastric hæmorrhage*, and in diseases due to relaxed condition of *venous and capillary walls*, but *not* active congestion of the same. He says it is the most efficient remedy he has ever tried in *epistaxis;* but without the combination of a cardiac sedative or an anodyne, it will not arrest the flow, if the pulse is rapid and bounding, and the nervous system is in a state of excitement. In such cases—

℞ Tinct. verat. viride..... ..... mm. xij
Morph. sulphat..... gr. j
Fl. ext. hamamelis..... ℥j

M.—S: Teaspoonful every hour.

He has had good effects from its use in *hæmophilia* and in one case of *hæmitidiosis*, and recommends it in *hæmorrhage from the bowels* and in *purpura*. It has been recommended internally for *varicose veins*—teaspoonful four times daily—with a well-applied cotton bandage. For *varicose ulcers*, touch them twice a day with a lotion of two drops of nitric acid in an ounce of water, besides bandaging the limb, and the internal use of fluid extract of hamamelis ʒj, four times daily. Dr. Shoemaker also used witch hazel in three cases of *varicocele* with so much relief that an operation was unnecessary. Dr. Gaddy reports a striking corroborative case in his own practice. The chief *contra-indication* to its use is subacute or acute congestion or inflammation of a sthenic character in any portion of the body.

Spiritualism before the Light of Science.

According to Dr. S. P. Crawford, of Stockton, Cal. (*Southern Practitioner*, Aug., 1887,) modern spiritualism is not a reality, and therefore is not entitled to serious consideration except to be condemned.

Multiple Neuritis.

Dr. T. M. Holmes, of Rome, Ga., reports (*Atlanta Med. and Surg. Jour.*, Aug., 1887) the case of a steamboat clerk, aged 22, who was much exposed to weather during winter—going often without coat, and sometimes so sleeping. He was also a toper, and much bloated. About five years ago he had a venereal sore. Some weeks before present attack, he had persistent rheumatic muscular pains in arms, back, and legs, for which he was treated with soda salicylate, with only little relief. Suddenly, as he was starting up the steps of his boat, his legs gave way, and he fell to the floor. Next morning he was unable to move. He had "wrist-drop" and "feet-drop," and could not control voluntary muscles. Every muscle seemed to share in this general paralysis. Diaphragm was paralyzed, and respiration was thoracic—about 30 per minute; pulse small, about 130. Hyperæsthesia and hyperalgesia marked—he could not be touched scarcely. Pains in feet and hands unbearable, with tingling sensations, paræsthesia and formication. Pains caused insomnia, and increased when atmosphere became more humid. Extremities were warm to touch, but pains were momentarily relieved by warm applications. Delayed sensation was another prominent symptom—a pin-stick not being felt for some seconds afterwards. Tendon-reflex totally absent; diplopia came on shortly. Grasp of his hand was scarcely perceptible. Appetite gradually became enormous, and digestion improved. Bowels constipated Urinated only at long intervals. There were also profuse night sweats. Memory much impaired. Frequently asked same questions three or four times during same conversation. After weeks he slowly improved—except the atrophy of the muscles and the drawing of the tendons, causing arms and legs to become flat and thin, and the fingers and toes to be flexed to their utmost. Nails became hard and brittle, thick in middle, tapering towards their ends—like "hob-nails." Wrists, elbows, ankles and knee joints strongly flexed—causing feet and legs to draw up in bed. Attempt to straighten them out gave great pain.

Alcohol and exposure to cold were undoubtedly the causes in this case. The pathological condition of multiple neuritis exists really in the peripheral nerves—not in the spinal cord, as formerly believed. The peripheral nerves, under the microscope, are found in various stages of degeneration. The axis-cylinders near the nerve-roots are increased in numbers or entirely destroyed; medullary sheaths broken

up into fatty fragments; the myelin divide into drops containing fat granules, and the degenerative mass within the Schwann sheath, consisting of myelin, and axis-cylinder in various stages of absorption. Only certain peripheral nerves are sometimes affected. But in the case reported, the sensory, motor and involuntary nerves were implicated.

For three months, potash iodide (beginning 10 grains, increased to 100 grains ter die) and compound tincture of gentian, with digestives, were given, with opiates as required. Then elixir of phosphate of iron, quinine, strychnia, syrup of hypophosphites compound, the constant electric current, were tried. After hyperæsthesia and hyperalgesia had abated, massage constituted the main treatment, with satisfactory results. The arms and legs fleshened up so as not to be recognized as the lately atrophied limbs, which are now almost naturally straight; but the fingers and toes are yet partially contracted. He is now free of pain, has healthy complexion, can rise up and sit on edge of his bed at his pleasure, and looks as if he will get well in a few months.

Rectal Disorders.

Dr. J. O. Lowrie, of Timpson, Texas, gives a resumé (*Texas Cour. Rec. Med.*, Aug. 1887) of the modern approved advances in regard to rectal disorders. Dr. Matthews, of Louisville, says *whiskey drunk is a perfect anæsthetic* where heart or lung disease or the whims of the patient do not allow of ether or chloroform. For *fistula in ano*, Dr. Matthews, after finding out how many fistulæ, inserts a long laminaria tent and lets it remain for several hours. Then he passes Otis' improved urethrotome, with a small point, and with the screw attachment dilates the sinuss. The concealed knife is then protruded to the extent desired, and the instrument withdrawn, cutting through the wall of the sinus its entire length. The hæmorrhage and pain are of no consequence. Hoffman, of New York, carries a rubber tube into the sinus by means of a flexible silver probe with an eye, and its ends approximated. The tube soon sets up destructive irritation of the sanious membrane, and in a few days there will be a healthy purulent discharge. The first tube is left in situ for a few days, and is then replaced in about three days by another of about half the size, and so on down. This is continued until a rubber thread is introduced; then a silver wire follows, and finally, in about twelve or fourteen days, the sinus is cured, without pain or material inconvenience. About 1874, Verneuil, of France, accidentally cured

some cases of *hæmorrhoids* by dilating the sphincters in search of other rectal trouble, and since then this has become a popular treatment—gentle but thorough dilatation of the sphincters. Its efficacy seems to be restricted mostly to piles of recent formation, to those that are aggravated by aloes, and especially to those that are accompanied by rigidly contracted sphincters. But when the piles are of long standing, constantly prolapsed, and control over the sphincters is lost, the ligature is *the* remedy. Dr. Matthews says he is more and more impressed by the important part the sphincter muscles play, not only in local manifestations, but also in producing obscure symptoms, and recites several cases.

Iritis

Is the title of a running, practical paper by Dr. R. H. Chilton, of Dallas, Texas (*Texas Cour. Rec. Med.*, August, 1887). By far the most frequent cause is syphilis; malaria is second in importance; idiopathic iritis is rare; traumatic iritis is always serious. It is easily recognized by the severe pain radiating to the temple, the engorged blood-vessels of the iris, contracted pupil, and in the beginning the pinkish zone around cornea. Treat the cause. Locally, atropia is indispensable. Dry cupping is preferable to local blood letting. Hot water—15 minutes every hour—to the brow and temple as well as lids, relieves pain and assists in dilating the pupil. After the disease begins to subside, use iodide of potassium internally as an absorbent, etc. Cocaine gives more relief from pain than all other remedies combined. In kerato-iritis, eserine combined with atropia is of great service. In chronic iritis or inflammation of any portion of uveal tract, pilocarpin combined with cocaine to lessen the blood supply, and bichloride of mercury internally, are the best remedies. He has seen more cases of iritis following the treatment of syphilis by the Hot Springs water than when the disease is treated at home by the usual remedies.

Carbolic Acid for Carbuncle.

In 1874, Dr. R. B. White, of Ennis, Texas, aborted (*Texas Cour. Rec. Med.*, August, 1887) a carbuncle by stuffing the little cavities and sinuses of the forming tumor with lint saturated with carbolic acid, and ever since then has used it with uniform success in like cases. He got the idea from an article by Dr. Peter Eade, of England, in *London Lancet*, of 1874, where he says he published the method in same journal in 1870.

Episcleritis.

Dr. R. O. Cotter, of Macon, Ga., says (*Atlanta Med. and Surg. Jour.*, Aug. 1887) this disease, when chronic, is a most obstinate one, although not very dangerous—only endangering sight to the extent of opacities on the cornea. Rarely, the sclera becomes so thin at points as to allow ectosia or bulging at those points. Episcleritis appears as a small, dusky, red, slight elevation of the sclerotic close to the insertion of one of the recti muscles—usually the external one. Generally there is subconjunctival redness, and the tissues are of a red, rusty or purplish hue. When the conjunctiva is not involved, the vascularity and swelling of the tissues beneath conjunctiva can be clearly seen. Photophobia may exist. Usually there is ciliary neuralgia and lachrymation. The fact that the dusky little nodule does not break down and ulcerate, diagnoses it from herpetic or phlyctenular conjunctivitis. In chronic episcleritis, the cornea finally becomes cloudy at the periphery. It appears to be an infiltration of lymph, and the opacity seems brought about by cutting off of nutrition on account of infiltration around the corneal periphery. As to treatment, his three cases were scrofulous. They were given codliver oil, potassium iodide (gr. x) three times daily, good, nourishing food, and out-door exercise. Solution of atropia (gr. ij to ℥j) was used locally as a sedative and to aid in removing opacities. Blisters on temples helped to relieve the ciliary neuralgia. All these cases went for months with occasional perceptible improvement, and as frequently relapsed. Increased doses of potassium iodide to ʒj gave better results. Three parts turpentine to 5 parts olive oil, locally applied in the eye two or three times daily, aided in removiug opacities. Atropia was not kept up all the time, for fear of producing glaucoma. All three got well with normal vision.

Prevention of Consumption.

Dr. J. W. Penn, of Humboldt, Tenn., thinks (*Southern Practitioner*, Aug., 1887,) that a seton introduced at some point, affording as little inconvenience as possible, and at the same time securing a copious flow of pus (as about two inches posterior to the nipple and below the axilla) from the very first indication of phthisis, is the most rational and effective preventive treatment of consumption. Of course the best of hygienic treatment must at the same time be taken up. He has been led to this view by a case or two in point.

Malarial Symptoms Due to Traumatism(?).

Dr. R. R. Harden, of Harmony Grove, Ga., reports (*Atlanta Med. and Surg. Jour.*, Aug., 1887) the case of Mrs. ——, age 15, married that morning, July 14th. Retired at 9 P. M. At midnight he was sent for. She was exceedingly nervous; temperature 102.6°. Gave potassium bromide and tincture of valerian. Next morning about 10 o'clock temperature and pulse little increased, but less nervous. Next morning, temperature 103.5°; pulse 115. There had been remission last evening. Temperature rising regularly each day until 19th it was 105° and pulse 120. Then he learned that on night of marriage her husband's approaches gave great pain, and a severe hæmorrhage set in. The addition of quinine in free doses to the sedatives rapidly restored health.

Indications for Operation in Lacerated Cervix.

Dr. W. Duke, of Memphis, Tenn., urges (*Miss. Val. Med. Monthly*, Aug., 1887,) the necessity of the operation, when there is any peri-uterine cellulitis, subinvolution, granular or cystic degeneration, etc. The great danger of non-repair is cancer. There is no part of the woman so liable to cancer as the glandular lining membrane of the cervix uteri. After preparatory treatment by hot-water injections, puncturing of cysts, applications of alteratives—such as iodine, nitrate of silver, glycerole of tannin, pessary, etc.—the curative treatment consists in repair of the laceration by trachelorrhaphy after the patient's health becomes good.

Alcohol in Medicine.

Dr. Eugene Foster, of Augusta, Ga., continues his excellently-well prepared defense of the *use* of alcohol in the practice of medicine, in the August No., 1887, *Atlanta Medical and Surgical Journal.* He answers in the affirmative, with good supports, the question, "Is there sufficient justification in any therapeutic advantage for existing use of alcoholic liquors by medical men"? The subject is to be further continued in the *Atlanta Journal.*

"The Ab Initio Gynæcologist"

Is the title of an effort at some rhyme by Dr. Charles M. Ramsdell, of Lampasas, Texas, in *Texas Courier Record of Medicine*, August, 1887.

Medical Consultations.

Dr. Thomas Lipscomb, of Shelbyville, Tenn., gives good advice on this subject (*Southern Practitioner*, Aug., 1887.)

Book Notices.

Autobiography of Samuel D. Gross, M. D., D. C. L. Oxon., LL. D., Cantab., Edin., Jeff. Col., Univ. Pa., Emeritus Professor of Surgery in the Jefferson Medical College of Philadelphia. With Sketches of His Contemporaries. EDITED BY HIS SONS. In Two Volumes. Philadelphia: George Barrie, Publisher. 1887. Cloth. 8vo. Pp., Vol. I, 407; Vol. II, 438. (From Publisher.)

What a commentary upon most of our lives have we to record when we place them side by side with the life-work of this great and good man! While few are blessed with the great power of intellect, made gigantic in its grasp by thorough study and remembered observations of passing events, which Dr. Gross possessed, none of us can feel that we are meting out our measure of usefulness when we compare our lives with his. With professional engagements which kept him all the time busy, his record shows that by a proper system of labor he yet had time to spare for others' comforts and enjoyments. The secret of his great usefulness to his day and generation undoubtedly consisted in his superb methods of work and rest—of study and application in their broadest signification. We do not know of a biography that is better suited to place in the hands of our young friends just beginning the study of medicine than this one. Characters moulded under the influence of this Autobiography will sooner or later come out as shining lights in the communities in which they are to make and leave their impression. There is nothing wonderful in the records of Dr. Gross' life. It was the full development of the man, according to systematic self-training, that brought him to the zenith of greatness. The history of such a man impresses the lesson that

"We can make our lives sublime."

The "Sketches of His Contemporaries" give the books an added interest. Most of those of whom he writes were men familiar in the history of their times, and some of them have fames that will fade only as time itself fades away.

Sexual Impotency in the Male and Female. By WILLIAM A. HAMMOND, M. D., Surgeon General U. S. Army (Retired List), etc, Detroit: George S. Davis. 1887. 8vo. Pp. 305. (From Publisher.]

The first edition, published only three years ago, considered impotence in the male only. Besides numerous addi-

tions in the sections on the subject, a distinct chapter is given in this edition on impotence in the female. The practitioner who remains without this book in his library remains without a great help to intelligent practice. There is scarcely a subject about which the family doctor is more frequently confidentially consulted; and he has frequently felt the embarrassment of his own ignorance when giving advice, simply because of want of some anthorities to post him. This book is a very important one to study carefully.

Manual of Treatment by Massage and Methodical Muscle Exercise. By JOSEPH SCHREIBER, M. D., Proprietor and Director of the Sanitarium, "Alpenheim" in Aussee, Styria, Austria. Translated with Author's permission, by WALTER MENDELSON, M. D., New York. Philadelphia: Lea Brothers & Co., 1887. 8vo. Pp. 285. Cloth. Price, $2.75. (From publishers.)

So many diseases are now treated successfully by massage and methodical exercise as the principal agent of cure that the profession wants a text-book on the subject. The book before us is the very thing needed. It cautions against abuses, and tells the uses of this treatment, and the classes of disease in which it is to be resorted to. It describes also the various methods—the proper methods—of giving message and of taking exercise, both with and without apparatus. It is a book also that should be placed in the hands of patients requiring methodical exercise. The illustrations help very much the description of the text.

Practical Treatise on the Diseases of the Hair and Scalp. By GEORGE THOMAS JACKSON, M. D., Instructor in Dermatology, New York Polyclinic; Assistant Visiting Physician to New York Skin and Cancer Hospital, etc. New York: E. B. Treat. 1887. Half Morocco Cloth. 8vo. Pp. 356. Price, $2.75. (From publisher.)

This book is illustrated by special drawings and photographs from life, which add so materially to the value of the text as to make the reader feel that he is getting the benefit of a real clinic. Its title well represents the range of subjects discussed. Its author is a careful observer, a faithful recorder and a fast advancing authority. Thus this work becomes a necessary volume in the library of the dermatologist, whilst the matters it discusses are just such as are of daily importance to the general practitioner. There is no other one work on the diseases of the hair and scalp, published recently in the English language, that is comparable

to this, and hence we advise our readers to add this one to their libraries, as they must have frequent occasions to refer to its teaching. Barbers who are desirous of keeping themselves at all scientifically informed, as they are frequently consulted about scalp diseases especially, could profit greatly by studying this treatise.

Students' Guide to Diseases of the Eye. By EDWARD NETTLESHIP, F. R. C. S., Ophthalmic Surgeon to St. Thomas's Hospital, etc. Third American from Fourth English Edition. With a Chapter on *Examination for Color Perception*, by WILLIAM THOMPSON, M. D., Professor of Ophthalmology, Jefferson Medical College of Philadelphia, etc. Philadelphia: Lea Brothers & Co. 1887. Demi-8vo. Pp. 475. Price $2. (From Publishers.)

This new edition of Mr. Nettleship's book is exactly what its title claims for it—viz., "A Student's Guide to Diseases of the Eye"—and covers the ground so thoroughly up to date that it is all a student of medicine can desire as a convenient text-book. It is cheap, not large enough to be cumbersome, easily handled, and gives all the information needed for a general knowledge of the eye and its troubles. To meet the advances of the last four years, nearly fifty pages of new material have been added to the edition of 1883. Not only will this volume prove valuable to the student, but will be of great service to the general practitioner, and an unquestionable addition to his library as a reference-book.

Diseases of the Heart Vol. I. By DUJARDIN BEAUMETZ, M. D. Translated by E. P. HURD, M. D., of Newburyport, Mass. Heavy Paper. 12mo. Pp. 179. Price 25 cents. (From Publisher, George S. Davis, Detroit, Mich.)

This is No. 2 of the "Physicians' Leisure Library" for 1887—the monthly issue for July. The Second Volume is announced to appear August 15th, so as to make the treatise on "Diseases of the Heart" complete. The merits of the work are such as to make it serviceable to every general practitioner. The covers are handsomely lithographed on heavy paper, making a handsome appearance. We cannot say that we approve of the color of the ink used for the text; it soon wearies weak eyes so as to compel the reader to lay the book aside for a rest. Black print would have been far preferable, and we hope the Publisher will return to the use of black ink for this "Library." This work is most therapeutic in the nature of its contents.

Pregnancy, Parturition and Puerperal State, and their Complications. By PAUL F. MUNDÉ, M. D. Paper. 12mo. Pp. 110. Published by Geo. S. Davis, Detroit, Mich. Price 25 cents.

This is one of the series of the first year of "The Physicians' Leisure Library," which the Publisher undertook about a year ago, and has made so popular by his excellent selection of subjects and authors. The present publication is a very valuable essay, covering all the chief points that are usually taught in the text books; but it is written in a style that likewise impresses the older practitioner, and gives him many hints and facts that he ought to keep in mind. The fame of the author itself commends this book.

Editorial.

Buffalo Lithia Springs, Va.

We welcome to our pages the article by Dr. Shelton, to be found in this issue, whose opportunities as Resident Physician at the Buffalo Lithia Springs, Va., for many years have given him a broad and ripe field of experience and observation. If confirmation of the pronounced therapeutic values of these waters as indicated by Dr. Shelton were wanting, we could refer the skeptical for proof to the publications of such authorities as Drs. E. L. Keyes, A. L. Loomis, Wm. A. Hammond, the lamented J. Marion Sims, W. T. Lusk, L. D. Mason, Alex. B. Mott, John T. Metcalf, etc., of New York; Roberts Bartholow, H. C. Wood, Henry Carpenter, Chas. B. Nancrede, J. M. Keating, J. B. Weistling, James North, of Pennsylvania; J. J. Moorman, G. Halstead Boyland, the late Harvey L. Byrd, Caleb Winslow, Wm. T. Howard, etc., of Maryland; James L. Cabell, Wm. B. Towles, Hunter McGuire, James B. McCaw, J. S. Wellford, Wm. F. Barr, R. D. Baskervill, O. F. Manson, B. F. Hopkins, H. M. Clarkson, and every body else in Virginia, and to hundreds of others scattered throughout the United States. Our purpose is accomplished if we draw sufficient attention to the article by Dr. Shelton to lead subscribers to read it carefully because of the information it gives. The waters are most notably beneficial in gouty, rheumatic and broken down nervous systems, in atonic dyspepsia, interstitial nephritis, cystitis, uric acid diathesis, neglected gonorrhœa, most of the functional diseases peculiar to women, etc. Whoever once becomes familiar with the therapeutic properties of these

waters will not be willing to surrender their use. It is also a delightful table water. During suitable seasons to be away from home, we would especially advise patients to visit the Springs. Col. Goode always selects good doctors to be the resident physicians.

The Medical Society of Virginia

Will hold its Eighteenth Annual Session in the Hall of the House of Delegates, Capitol Building, Richmond, Va., beginning at 8 P. M., Tuesday, October 18th, 1887, and will continue certainly through Friday night's session, October 21st. A number of distinguished visitors will be present and add to the interest and benefit of the session by papers, discourses, and probably clinics. The President, Dr. Bedford Brown, of Alexandria, Va., writes very encouragingly as to the great success of the meeting; and if but one half of the interest which members have expressed to the Secretary be manifested, this Eighteenth Session will be *the* great session in the history of the Society. The usual annual circular announcement of the session by the Executive Committee (Dr. W. W. Parker, Richmond, Va., Chairman) will be issued about September 16th or 17th.

The Medical Examining Board of Virginia

Will hold its usual semi-annual session this year in Richmond, Va., beginning Monday, October 17th—the day before the beginning of the session of the Medical Society of Virginia in the same city. A fuller announcement will be made in our October number. In the meantime everybody interested in this session of the State Examining Board can address the President, Dr. H. Grey Latham, of Lynchburg, Va., or the Secretary, Dr. Hugh T. Nelson, of Charlottesville, Va., or the Chairman of the Executive Committee, Dr. Hugh M. Taylor, Richmond, Va., for further information.

Since the above was set up we have received the follow-official announcement:

MEDICAL EXAMINING BOARD OF VIRGINIA.
SECRETARY'S OFFICE.
CHARLOTTESVILLE, VA., Sept. 1st 1887.

The Medical Examing Board of Virginia, will convene in the Senate Chamber at Richmond, on Monday, October 17th, next ensuing at 8 P. M.

Applicants for permit to obtain license to "*Practice Medicine and Surgery in Virginia*," will please present themselves promptly at 8 A. M. on Tuesday, October 18th.

A full attendance of the members of the Board is earnestly desired for the purpose of transacting business of importance. By order of

H. Grey Latham, M. D.. *Presd't. Med. Ex. Board.*
Hugh T. Nelson, M. D., *Sect. and Treas. Med. Ex. Board.*

Lactopeptine

Is a digestive remedy of such generally recognized value that it needs no introduction to the profession. The indications for its use are clearly pointed out by an examination of its formula. It is one of the few physiological remedies that does what theoretical considerations tell us it ought to do. Even empirically prescribed, it does no harm; while, when judiciously given, it acts charmingly. Our printers, by an error of oversight, omitted the page advertisement in our July and August numbers of the New York Pharmacal Association, who are the manufacturers of Lactopeptine, which we deeply regret. While this Association has a box in New York post-office, their factory and office are at Yonkers, N. Y.

Bergeon's Enemata Treatment for Consumption, Etc.

To those who have personally asked our opinion, it is known that we never did "take much stock" in Bergeon's method of treating consumption and other wasting diseases. We are not the enthusiasts in the fear of bacilli, etc., as *the* cause of consumption that some of our readers are; for we believe that physiological derangements of digestion and respiration are still the chief factors. Without antiseptics or distinctive germicides as a part of the treatment, we think that the more pronounced physiological remedies are the preventive as well as curative remedies in tubercular diseases. Bergeon's treatment does not reach the seat of the disease—does not go to the root of the trouble; and, as we predicted, would have only the usual tidal wave of success common to new ideas well advertised, and would soon go out of fashion. It is not the thing the profession is seeking. True to our prediction, the gaseous enemata treatment is being abandoned, as useless or injurious, in those hospitals and practices where it was late enthusiastically undertaken. Many a doctor who, six months ago, bought a full apparatus and outfit to carry out Bergeon's treatment, according to directions, is now anxious to dispose of these things at a very liberal discount on original cost.

Vaccinate Early.

We are reminded by the reports common in our newspapers of the threatening appearance of smallpox around the American coast that we should vaccinate our children patients early this fall or winter. Since bovine virus has so nearly completely supplanted humanized scabs or virus in professional esteem, we would call special attention to the New England Vaccine Company's advertisement which begins in this issue. There is no virus that is more carefully selected and guaranteed than that which is furnished by this Company. It is the virus which is in general use by the profession of this section of Virginia. We urge our subscribers in need of vaccine virus to send in their orders soon to the Richmond agent, Mr. T. Roberts Baker, 919 E. Main street, than whom there is nowhere to be found a more competent or reliable a pharmacist or dealer.

Practice.

This bright exchange of our city that is always fresh with some good practical original suggestions culled from the experience of some of the cleverest practitioners of the country, came out June and July as a double number, which will make the volume close with the December number. *Practice* is *Winn*-ing its way everywhere it is introduced.

The Vermilion Parish [La.] Medical Society

Is composed mostly of live, progressive young men. The meeting of September was to have discussed typhoid fever. President, Dr. W. D. White; Secretary, Dr. C. J. Edwards; Treasurer, Dr. Robert J. Young; Corresponding Secretary, Dr. F. F. Young—all of Abbeville. The other members are Drs. LaBlanc, of Abbeville; Cushman of Youngsville, J. B. Ramsey, of Ramsey, and J. T. Hamblet, of Perry.

Dissecting Material in Georgia.

Under the provisions of the recently enacted "Candler Bill" by the Georgia Legislature, a certain class of dead bodies are turned over to the profession for dissecting and fairly distributing them among the medical colleges. Hereafter grave robbing in Georgia is to be a felony instead of a misdemeanor.

The New Orleans Polyclinic

Is the latest of the new college announcements received, and is to begin its first session of ten weeks next April. It has a good corps of instructors.

Instrument Department of Mellier Drug Co.

The title of "Mellier Drug Co.," unfortunately does not show the fact that it has excellent facilities for manufacturing surgical instruments, and that the Company import many articles at such prices as will allow it to sell them cheaper than has been done by other houses in this country. Send to the firm for a copy of their "Reduced Price-List of Surgical Instruments." Their new advertisement removes the trouble somewhat.

Dr. Bedford Brown,

Of Alexandria, Va., President of the Medical Society of Virginia, has been taking a month's vacation at Long Branch and other summering places. His health was broken down by overwork in practice during the heated seasons in July, and he needed the rest. We are glad that his vigor is returning and that he expects to resume active professional duties early in September.

The Ninth International Medical Congress

Is in session in Washington, D. C. this week, (September, 5–10), and a great session it will be. All of our subscribers are advised to send at once their subscriptions for the daily edition of the *Medical Register*, of Philadelphia, giving reports.

Obituary Record.

Dr. Wm. A. Byrd.

It pains us to have to record the death of this warm friend of our journal. We learn from the September No., 1887, of the *St. Louis Medical and Surgical Journal*, which comes to hand just as we are going to press, that the Doctor died at his home in Quincy, Ill., during the month of August. "The immediate cause of his death was insolation. Dr. Byrd was a surgeon who was not only well known for his skill, but he had earned quite a reputation for his originality. He was a prominent member of the Illinois State Medical Society and of the American Medical Association. His contributions to medical literature were numerous and valuable. His loss will be felt by all those who had the pleasure of knowing him and his genial manners." He was under promise to contribute a paper to our October number, which we fear he did not have time to prepare after making the promise.

VIRGINIA
MEDICAL MONTHLY.

VOLUME XIV—No. 7. WHOLE NUMBER, 163.

RICHMOND, OCTOBER, 1887.

Original Communications.

ART. I.—**After-Pains.** By THEOPHILUS PARVIN, M. D., LL.D., Professor of Obstetrics and Diseases of Women and Children, Jefferson Medical College, of Philadelphia, Pa.; Honorary Fellow Medical Society of Virginia, etc.

It is not necessary to describe after-pains, for they are so frequently observed by the practitioner that the pictures he has had often presented him in practice are very much better than any that words could give. Nor is it required to state that while the primiparous woman almost invariably escapes this suffering it is quite exceptional for the multiparous not to experience it. Finally, the great distress that these pains cause in some cases, the danger which they foretell in a few, and the discomfort they bring to all who endure them need not be stated.

By many practitioners, after-pains, if not excessive as to suffering, or as to continuance, are regarded as beneficial—evil bringing good, hurt that causes healing. They claim that they are dependent upon uterine contractions, which secure thorough emptying of the uterus and normal retraction of the organ, and thus hæmorrhage is guarded against, and uterine involution promoted. At least partial confirmation of this view is given by the well-known fact that these pains

are more severe, other things being equal, after a rapid labor, or in case the uterus has been greatly distended as by pluriparous pregnancy, or by polyhydramnios. It is not my purpose to dispute this opinion as probably just in many cases. Nevertheless, it does not apply to all; and to make this position good, an inquiry must be made into the cause or causes of these pains.

Almost all recent writers upon obstetrics explain after-pains as resulting from retained clots, or a clot, which the uterus endeavors to expel—a view almost the opposite of that which in a past age was held to explain the ascent of water in a pump; nature abhors a vacuum, so now the uterus abhors a plenum. Some, however, with Depaul consider them a continuation of the rhythmic contractions of labor.

The older obstetricians found various causes for this suffering. Thus Mauriceau, writing nearly two hundred years ago, said that the *tranchées* were caused, first, by wind contained in the bowels, by which they are easily filled after labor; second, by a foreign body remaining in the womb after labor, such as a false conception, a piece of the placenta, or a clot of blood; third, by sudden suppression of the lochia; and fourth, by great stretching of the ligaments of the womb by reason of a hard labor. Dionis, writing subsequently to Mauriceau, rejected his explanations of the causes of after-pains, asserting that they were produced by the effort of the lochia to escape from the vessels of the womb. This escape was easy in primiparæ, and hence they did not suffer; but when the discharge ceased, cicatrization of the vessels took place, and the resulting cicatricial obstructions must be overcome after a subsequent labor, and hence the suffering of the multipara.

But without further reference to the etiology of after-pains as maintained by Mauriceau or by Dionis, or that which is now generally accepted, I wish to suggest that in some cases the affection is of purely nervous origin. The important part in the diseases of women unconnected with child-bearing assigned to irritability of the uterus by the late Professor Hodge, can never be forgotten by the student of American medicine, still less by any one of the hun-

dreds who listened to the oral instruction of this most able and conscientious of teachers; and while it cannot be denied that he gave far too great extension to the influence of this condition, and restricted uterine therapeutics to very narrow bounds in making his pessary the chief remedy for irritable uterus, yet I sometimes think that the day is coming when much that he taught will be revived. But though irritability of the uterus has been, and probably will again be, recognized as an important element in the pathology of diseases of women, its influence in obstetrics is scarcely noticed. Nevertheless, how often the obstetrician is reminded of the great differences in the response which the womb gives to irritant causes! Thus one pregnant woman is exposed to the greatest mental or physical shocks without miscarriage resulting, while in another it is produced by the most trivial causes; the induction of premature labor is in one case effected within twenty-four hours by the introduction of a flexible bougie in the uterine cavity, while the same means, conjoined with alternate vaginal douches of hot and cold water, may be used in another for a week before the desired result is accomplished. Now the simplest and the true explanation of these different effects is found in the relative irritability of the uterus in different subjects—the organ is normally irritable in one woman, excessively so in a second, defectively so in a third. So, too, I believe that in some cases violent and tormenting after-pains may be the expression of excessive irritability of the uterus, and that just as we may have vesical or rectal tenesmus without any inflammatory change, and without there being in either bladder or rectum anything more than a drop or two of urine or of mucus requiring expulsion, so there may be a tormenting and very painful uterine tenesmus when the uterus has nothing to expel, and only the normal lochial flow passing off.

That my meaning may be more fully apprehended, and my position be confirmed, the following report of a case recently under my care is presented. The history of this case will, in addition to the essential matter in hand, also be of interest in that in the preceding labor there was in the first stage a compound presentation, and that after the labor un-

der the influence of severe suffering from the after-pains a great elevation of the temperature took place:

Mrs. ——, the mother of two living children, was taken in her third labor on Wednesday afternoon. External examination showed a presentation of the vertex, the position being left occipito-anterior; by internal examination, made after the pains had continued for four hours, it was ascertained that the left hand was descending by the side of the head. Hitherto the patient had been sitting or walking alternately, with that restlessness of body and mind characteristic of the first stage of labor, but I now directed her to remain lying, and lying chiefly upon the right side, fearing lest a sudden escape of amniotic fluid might, if she were either sitting or walking, cause the hand to descend lower, and hoping that a horizontal position would facilitate retraction of the hand, or its being pushed away by the advancing head. My hope was realized, for a vaginal examination made after the rupture of the membranes showed that the hand no longer presented with the head. The labor ended about two o'clock on Thursday morning; careful examination of the placenta proved that no fragment of it was left in the uterus. After-pains occurred, but they were no severer than are usually observed in the multipara; they were mitigated by the application of cloths wrung out of hot water to the lower part of the abdomen, and by an occasional dose of ten drops of laudanum. The condition of the patient continued quite satisfactory—pulse and temperature normal, and the appetite good, until one P. M. on Saturday, when violent uterine pains began, attended with bearing-down efforts, and a feeling as if there was something to be expelled from the womb. I saw her two hours subsequently, her suffering unabated, though forty drops of laudanum had been given, and turpentine stupes applied to the abdomen until the skin had been severely burnt, and there was added to the uterine distress the suffering from this cause. Her pulse was 120, and her temperature 103.5°. Cloths wrung out of cold water were applied to the surface irritated by the turpentine, and believing from the character of the pains there might be a clot in the uterus, as well as fearing a beginning of septicæmia, I determined to wash out the uterine cavity with a hot solution of corrosive sublimate, 1 to 3000. This was done, the organ being found excessively sensitive to touch; but no clots or clot was discovered, though nearly a quart of the solution was employed, and there was not the slightest relief

to the suffering, nor did any relief come from repeating the laudanum until ninety drops in all had been given. Ten grains of quinine was administered, and the dose repeated in three hours, while inhalation of ether was used from time to time as the paroxysms of pain required, the anæsthetic being thus continued for more than three hours. By 8 P. M., the suffering had become very much lessened, the temperature had fallen one degree, and the pulse was 100; three hours later the temperature was 100°, and the patient was sleeping pleasantly. The next morning her temperature was normal, and uninterrupted and complete convalescence followed.

This case proves that there may be violent expulsive efforts of the womb when there is nothing to be expelled; that under the influence of these frequent and strong contractions the organ may become exquisitely sensitive, and a notable increase in the general temperature occur. Now it seems to me that the cause of these violent pains was excessive irritability of the uterus, and probably the same cause is the chief if not the sole factor concerned in some other cases of very painful uterine contractions following labor. Holding this view, I cannot regard after-pains as in all instances beneficent, but only evil. Of course I know that the use of quinine for the relief of after-pains is by no means new, but I believe it, in combination with opium, is the best treatment in case this suffering is caused by excessive irritability of the uterus.

ART. II.—**A Few Practical Suggestions to the General Physician Regarding the Treatment of Certain Eye and Ear Affections. (I) Blepharospasmus; (II) Boric Acid for Stye; (III) Furunculosis of Auditory Canal.** By GEORGE REULING, M. D., Surgeon to Maryland Eye- and Ear-Institute, Prof. of Ophthalmology and Otology in Baltimore Medical College, etc.

(I) Blepharospasmus.

The spasmodic closure of the eyelids, which is so frequently observed in children, and not rarely in adults, as one of the symptoms accompanying phlyctenular conjunctivitis and keratitis, granulated eyelids, foreign bodies lodged

in the eye or conjunctiva, and which is especially severe in cases of gonorrhœic ophthalmia and diphtheritis oculi, often forms one of the most difficult obstacles to the proper inspection of the eye and its respective pathological conditions. The procedure of forcibly compelling the patient to permit the separation of his eyelids was a most disagreeable task, which is now considerably facilitated since we have recognized the admirable qualities of cocaine as a reducer of arterial pressure, as well as a local anæsthetic. A four per cent. solution of muriate of cocaine instilled into the conjunctival sac of a patient suffering from blepharospasmus is therefore the simplest and most welcome remedy for the prompt relief of this troublesome affection.

(II) **Boric Acid a Remedy for Stye.**

A simple and effective remedy for stye has been found by me to be a solution of fifteen grains of boric acid to an ounce of water. By applying this solution three times a day to the inflamed part of the eyelid, by means of a camel's hair brush, this painful and annoying affection will be conquered very rapidly.

Soon after the recommendation by Sacmish and other authorities—"to use boric-acid solution in the bandaging after cataract operation"—I was induced to saturate the round piece of linen covering the eye operated upon, in a case of cataract extraction, where the pressure of the bandage had produced blepharitis, and also an exceedingly painful stye (a small furuncle close to the ciliary margin of the eyelid). The next day, both affections had almost disappeared, and the patient, a very frail old woman, had been relieved from the suffering almost from the very moment the solution was applied. Since then I have rarely been obliged to use any other remedy, provided the patient applied for treatment during the acute stage of the stye; but even at a later period of the effloresence, I have generally seen the stye completely disappear by the sole use of boric-acid solution.

(III) **Cocaine for Furunculosis of the Auditory Canal.**

This extremely painful affection yields in its earlier stages

very promptly to the instillation of a solution of muriate of cocaine. The following case, observed by me in July, 1886, led me to the use of this remedy:

Mrs. A. M., a prominent lady, and the sister-in-law of one of my colleagues, was apparently dying from disease of the heart, with hydro-pericardium, etc., and in addition to her excessive dyspnœa and attacks of deep syncope, she was also suffering most excessively from earache, for the relief of which I was called in the case. When I discovered that a furuncle had formed close to the tympanum, and was just about to form an abscess, I felt somewhat in a dilemma as to my procedure, as I could not make up my mind to increase the untold suffering of this afflicted lady by additional pain caused by the surgical opening of the furuncle. I instilled, therefore, a few drops of a four per cent. solution of muriate of cocaine into the meatus, and awaited developments. In less than five minutes the swelling of the meatus at its base, the seat of the furuncle, was reduced to less than one-half its size; all intensity of injection had disappeared, and by a repetition of the drops every three hours for the next twenty-four hours, the furuncle totally disappeared. The look of relief from her agouy in this extremely ill patient made an everlasting impression upon me, and spoke more than words could express of the blessings which Koller's discovery has bestowed upon suffering humanity.

ART. III.—(I) **Uterine Hæmorrhage. (II) Large Uterine Tumor. (III) Uterine Polypi.** A Clinical Lecture delivered at the Hospital of the University of Pennsylvania. By WILLIAM GOODELL, M. D., of Philadelphia, Professor of Gynæcology. (Reported by William H. Morrison, M. D.)

Gentlemen,—Suppose a woman about fifty years of age, who has borne children, comes to you with the statement that at the age of forty-five the menses ceased, and that she had no discharge of blood from the vagina from that time until six months ago, when she again began to lose blood, What would you suspect? You should suspect cancer of the cervix. Why? Because as a result of her labors a laceration of the cervix has probably happened, and carcinoma has developed in the cleft of the tear. I will venture

to say that in ninety-five out of a hundred such cases this diagnosis would be correct.

Suppose, however, that a woman, also about fifty years old, has not borne children, and that the menses have not ceased, but have continued and increased in quantity, What then should pass through your mind? You should infer that the hæmorrhage is probably due to one of two factors—either to a fibroid tumor, which is the more common, or to a polypus. The fact that she has not borne children would tend to eliminate the suspicion of carcinoma; for it is exceedingly rare to find cancer of the neck of the uterus in sterile women. I have, however, seen this in two instances, one of which, however, tends to strengthen the rule. This was the case of a lady, about sixty years of age, who had a large fibroid tumor of the womb, which in the process of enucleation had forced open the os to the size of a silver dollar, and was protruding from it. I wrenched the tumor off and removed it. Cancer subsequently developed in the cervix, which had been injured by the long protrusion of the tumor. The second exception came to my notice a few months ago. It was that of a married lady who, I am sure, has never borne a child. She had a cancer of the neck of the womb, from which she died. Carcinoma will sometimes attack the fundus of the uterus in the sterile, but this is also very rare.

CASE I.—**Uterine Hæmorrhage.**

The case which I now bring before you is that of a woman who has been married twelve years and has been sterile. Menstruation began at the age of fifteen, and was always regular until two years ago, when she had an attack of menstrual cramp, which was relieved by anodynes. This was followed by menorrhagia and metrorrhagia. Menorrhagia, as you well know, means an increased monthly flow, while metrorrhagia means a flow of blood from the uterus irrespective of the menses. This bleeding has continued ever since. During the past two years she has gradually lost flesh.

When I heard this history, I said to myself this cannot be a case of cancer, for the woman has not borne any children. It is probably one of two things: either a fibroid tumor or a polypus, probably the latter, for a polypus is more likely to bleed between the monthly periods than a fibroid tumor.

I then made a digital examination. I found the cervix thinned and distended as if a case in which the head of the child is descending, but the os is not dilated. With a little difficulty, I inserted the tip of my finger through the os, and felt a fibroid tumor, or a polypus.

A polypus differs from a fibroid tumor only in the fact that it has a pedicle. It may, like a fibroid, spring from any portion of the inner wall of the uterus, or from the cervical canal; and like it partakes of the stroma from which it springs.

As you see, the patient presents a peculiar hue which cannot be told from the cachectic appearance produced by cancer or by hæmorrhage, or by that caused by saturation with malarial poison.

I purpose to-day to attempt to remove this mass, and I shall do one of two things. I shall first attempt to dilate the cervical canal with my dilator, so as to permit the removal of the tumor. If this cannot be done, I shall then cut the cervix on each side, remove the tumor, and sew up the incisions.

I introduce the dilator, and stretch the canal rapidly, as I do not think that it will tear, and if it does, so much the better. Afterwards I could close it by a stitch or two. When I began to dilate, the opening in the os would not permit the introduction of the little finger, but I now can readily insert it. Before going any further, I shall thoroughly cleanse the vagina and lower portion of the uterine canal with a 1:2000 solution of the bichloride of mercury. I next introduce the polypus forceps, and, catching the growth at haphazard, try to twist it off. There is very little danger of injuring the womb in this manœuvre, for the union of the tumor to the uterine wall is usually not very firm. The tumor, as you see, breaks off and comes away in pieces. It is probably a fibroid tumor in the process of enucleation, and does not seem to have a pedicle. I have now removed all that it is possible to get away to-day.

In order to prevent bleeding, I shall inject some vinegar, which is one of our best astringents, and is also a good antiseptic. It is infinitely to be preferred to Monsel's solution, for the latter produces hard plaster-like clots, which undergo putrefactive changes, break down and imperil the patient's life through the absorption of septic matter. The vinegar also causes the uterus to contract, and thus prevents bleed-

ing. It is rare that I use Monsel's solution. Sometimes in ovariotomy I rub a little over an oozing surface, with my finger, but I never inject it into cavities.

Having thoroughly cleansed the parts with the sublimate solution, I shall insert a suppository of iodoform. Since the patient is in a hospital and constantly under observation, I shall not tampon the vagina, for this is rarely needful after such an operation, the womb usually contracting at once and stopping all bleeding. Ergot will be given for a few days.

CASE II.—**Large Uterine Tumor.**

This woman is fifty-four years of age, and was married at the age of fourteen. She has had but one child, which was born thirty-nine years ago. Her husband died fifteen years ago. Three years ago she noticed, for the first time, a small tumor in the abdomen, which has now increased to a large size.

The menses ceased about one year ago, and previous to that they were not excessive. Abdominal tumors are found in the majority of instances in sterile women, in widows and in married women who have ceased bearing children, or who are trying to avoid conception.

The first question to consider is the nature of this tumor. It has an irregular surface, and presents an evident bulging toward the right side which does not look like an ovarian tumor. The irregularity gives me the impression that this is a uterine tumor. I am unable to detect fluctuation, and we must conclude that this is a solid tumor or a colloid tumor. On percussion, we find dullness over the growth, while around it there is resonance.

Is this tumor connected with the ovary or with the uterus? is the next question. On our conclusion with reference to this point will depend the treatment adopted. Examining per vaginam, I find that the uterus is drawn up so high that I cannot reach the cervix, which is away up above the symphysis pubis. When I move the tumor, the upper vagina moves. Very often when I cannot reach the cervix with the finger, I am able, with a little manipulation, to introduce the sound, and I succeed in this instance, because the cervix is effaced and the os is flush with the vaginal roof. Now, when I move the tumor the motion is communicated to the sound. Occasionally an ovarian tumor becomes adherent to the uterus and draws it up. This always perplexes the diagnosis. The sound gives a measurement of six inches; but a flexible

instrument would I think give a still greater measurement, by adapting itself to the curved and crooked passages.

From my past experience, I should say, that this great length indicates, in all human probability, a tumor of the womb—a uterine fibroid. This is probably a soft myoma, for it has grown with extreme rapidity.

In the treatment of this case, I think that there is but one thing to be done, and that is to remove the tumor. The woman has passed the menopause, and the tumor is still growing. There would, therefore, be no use in removing the ovaries.

I am afraid that this tumor will prove to be a sarcoma. I have no positive proof of this, but it has grown so rapidly, attaining in three years a size which ordinary fibroid does not reach in that time, and has especially done so since the menopause, that it necessarily arouses our suspicions. If, after the circumstances of the case have been explained to her, the woman is willing to run the risks, which will be twenty-five per cent. against her, I shall be willing to remove the tumor.

CASE III.—**Uterine Polypi.**

This patient is forty-seven years of age. For the past seven years she has had menorrhagia. The menses recur every four weeks, and generally last about one week. In this patient we again see the cachectic appearance from hæmorrhage, which cannot be distinguished from that of malaria or of carcinoma.

I believe that in this case we shall find a fibroid tumor. It may possibly be a carcinoma. A cylindrical epithelioma of the cervix may develop, but this is rare. Again, excessive ovarian congestion might produce this hæmorrhage, but I think that this could not last seven years without seriously crippling the woman. The bleeding may be due to the presence of a polypus, but if this were the case, we should expect great pain at the monthlies, and not only menorrhagic but also metrorrhagic.

On making an examination, I find the os pretty well dilated, and projecting from it we have a tumor which is undoubtedly a uterine fibroid. I am surprised that there is no history of metrorrhagia in this case. I shall remove this without ether, as the woman is willing to bear the pain. It comes away without difficulty. This has been a fibroid tu-

mor in the process of enucleation. I find a second tumor, which I remove in the same manner; and now I find a third, which I also remove.

Besides these, there is a fibroid tumor in the wall of the womb. We shall not attempt to remove this to-day, but shall give it time to be forced out. These polypi have all been fibroid tumors, which have gradually been forced into the cavity of the uterus. We shall give the patient ergot in order to favor the forcing down of the tumor in the uterine wall. She will take twenty drops of the fluid extract of ergot three times a day. I shall inject some vinegar for its hæmostatic action. The patient will be kept in the house until all danger from hæmorrhage has ceased. She will then be sent to her home and the ergot kept up. In the course of a few weeks or months, the remaining tumor may be forced down and removed without difficulty. We shall not give iron at once, as this sometimes increases the flow of the blood.

Art. IV.—**A Plea for Bloodletting from a Practical Standpoint.**

By R. J. H. HATCHETT, M. D., Henderson, N. C.

A revolution in the methods of treating disease has occurred in the last twenty years—a revolution which, like most of its predecessors, is characterized more by its radical than its conservative features.

"Why do doctors never bleed their patients now?" is a question often asked by some old gentleman or lady, who remember so well the very many occasions, on which he or she has witnessed the prompt and speedy relief in cases of great suffering and danger—in apoplexies, colics, pneumonias, in many obstetrical cases, in most spasmodic, and in all acute inflammatory fevers.

Being an old member of the profession, one of the class of 1835, University of Pennsylvania, and having witnessed for thirty years in my own practise and that of others, the effects of depletion in the cure of disease, and having also witnessed, for the last twenty years, the effects of treatment almost entirely by drugs, I regard myself to be a more impartial and competent witness than those who have never seen a man bled, or leached, or cupped. Then, after stating

what I believe to be facts in the case, I will proceed with my argument, endeavoring to show that the depleting method is more in accordance with the plan of nature—the great medicatrix of Hippocrates and Galen—than is the one of trusting entirely to drugs.

I honestly believe (and I here appeal to the older members of the profession to say if I am right or wrong) that thirty years ago our patients were much sooner relieved, we had a much larger percentage of recoveries, and our patients while sick were kept in a more comfortable condition, and we had fewer chronic cases, than at the present time.

To proceed with my argument for depletion—the means *always* adopted by nature, when she relieves any acute attack of disease—I state it as an axiomatic truth, that no sick man will get well without depletion, directly or indirectly induced, by the efforts of nature, or by means and appliances used by the doctor or nurse.

My first proposition is, that a state of health requires constant depletion—with repletion about thrice in the twenty-four hours. An individual in a state of health requires a given amount of blood to circulate through his system. To preserve a healthful condition, this blood must be kept pure; and for that purpose, many organs are provided, whose duty it is to separate and throw off all offensive matter; thus the lungs, the liver, the kidneys, the skin, and innumerable small glands, have their allotted task to perform, and they act as so many waste gates in reducing the amount of circulating fluids. So we learn that nature has provided means for the constant consumption and diminution of blood circulating through the body; in other words, is constantly *depleting*. And whenever, from any cause, this process is hindered or suspended, then the man is sick—he is no longer in a state of health. In the healthy individual, when the reduction has been sufficient to require more material, the stomach, the watchful superintendent of the animal machine, comes to the rescue, and, by what we call appetite, imperiously demands food; and until the blood-vessels have been sufficiently emptied, the stomach does not only not call for, but rejects with loathing any food that may be offered.

One word here parenthetically as to the supervision of the stomach. It is placed within easy and rapid communication with every atom of the animal structure, and it is its special function to prepare and furnish suitable and nutritious material for each and every atom.

Do the numerous little vessels employed in the formation and growth of bone need more lime or phosphorus? Then just as the builder calls for more bricks or more mortar, so surely will the employees of the human builders send a telegraphic demand for the kind of food containing the element required; and if the demand is not heeded, the inevitable result would be a strike, which, if it did not prove fatal, would be immensely detrimental. Thus we can account somewhat for that almost unerring faculty (bestowed by the Great Master Builder on all animals) called *instinct*, and we may learn how important it may often be that we should be guided by its importunate cravings. But more of this anon, when we come to speak of the nervous apparatus.

I repeat, that in a state of health, depletion is constant and repletion occasional; and that the process of nutrition, and the excretions of the secretory organs, are waste-gates, which protect the system against too much plethora, too much engorgement and inflammation. Now, suppose that on account of violation of some law of nature, some one of these organs is disabled from doing its work perfectly. In that event, the blood goes back to the heart containing some impure and irritating ingredient. This, in turn, excites the heart into more vigorous action, flooding all the organs with impure blood, which at each round becomes more and more impure, engorging and inflaming the lungs, the liver, the brain, or some other important organ. They have more blood than they can manage; so they shut down their waste-gates, and refuse work altogether. The man is now very sick—all the organs are oppressed, the heart beats rapidly, and there are pains in the head, back, and all the limbs.

What must we do? is a question so important that it is often one of life or death. The old practitioner who has spent the best part of his life in studying and observing the

methods of nature in the cure of acute attacks, who has witnessed many rapid spontaneous cures resulting often from hæmorrhage, cholera morbus and diarrhœa, or from some other rapidly depleting cause—the old practitioner, taking a common sense, and therefore a reasonable view of the situation, believing that he who had enough blood in his body while in a state of health, while the waste-gates of nutrition and secretion were standing open, and acting as safety-valves to a crowded circulation—that the same individual, when sick, and the waste-gates closed, would have *too much* blood for his comfort or safety; and that nature, in her efforts for relief, by the rupture of some blood-vessel, might perform the operation at some dangerous point, as the brain, the lungs, stomach, or intestines, seeing that the object nature was striving to accomplish was depletion—then, I say, this old fogy would come to her help, by cording the arm and open a vein, and thus accomplish in few minutes a work which might have required of unaided nature many days or weeks to perform —if, indeed, at all able to perform—especially if hindered by drugs to paralyze her nerves, the seat of her recuperative energies.

Now, what is the usual result of abstracting blood from an adult patient who may be suffering under the symptoms related above? According to circumstances, the plethora of the subject, the violence of the attack, etc., if 6, 10, or 16, and, on some extraordinary occasions, even more ounces of blood be taken away *rapidly* through a good orifice in the vein, the pulse will soften until there is approaching syncope. When practicable, the operation should be performed while the patient is in the sitting posture; then no danger will result from the syncope; for as soon as he resumes the recumbent posture, sufficient blood will flow to the brain, and he will quickly rally. If you will then question your patient, you will find in almost every case that the pains are very much relieved, if not entirely subdued; and you will find that the skin becomes moist and pleasant, the respiration freer, and the condition generally so comfortable as to induce a quiet and natural sleep. And after a quiet and natural sleep, you are apt to have a return of appetite; and with

good *natural* sleep and appetite, your patient will require very little physic. A few grains of calomel, from 2 to 6, by its calming and soothing sedative action on the entire nervous system, and by its wholesome action on the fibrin of the blood, coaxes and encourages the entire glandular system—all the organs of secretion—to return to their accustomed tasks; then your patient is convalescent, and only requires good nursing.

One word about calomel. Thirty years ago my brother doctors accused me of being afraid of calomel. Well, I was afraid of it—afraid to use it as they did for every conceivable condition, and to repeat it, dose after dose, until they had salivated their patients to an extent that was always loathsome, and not unfrequently fatal. They used it with the same blind faith that many now entertain for opium and quinine. Calomel is a sedative. It subdues the excitement of inflammation, which we call fever. It is therefore antiphlogistic—a substitute or auxiliary to the lancet; and when the lancet was first dropped, those who used calomel judiciously were much more successful in the treatment of disease (at least I think so) than the medical profession are at the present day, when the lancet and calomel are both ignored and abandoned as relics of barbarism.

I have spoken of nature, the recuperative powers, and of instinct as synonymous terms, and have said that the nervous system is the seat and distributor of vital power—that mysterious power we call life. Life exists in it, and by means of its cords and its filaments, is conveyed over the entire body. "The words vital power can offer to the mind only the idea of that power which presides over the formation, development and preservation of the individual." And again, from the same author (Broussais): "The power which presides over the formation, development and preservation of the body is that which accomplishes the assimilation of nutritive substances, extracts from them gelatin, albumen, and fibrin; regulates the form, consistence, volume and duration of our organs, and re-establishes them in conditions requisite for the state of life and health, whenever, in consequence of the action of a morbid cause, they have deviated

from these conditions." Then, is it wise to cripple that power—with powerful narcotics to stupefy the brain and paralyze the nerves, the seat and home of this power; to arrest and imprison the friendly messengers that are constantly conveying to the centres information of the condition of the system? Prick your finger with a needle, and you are instantly notified of the fact, so that you can guard against its repetition. Pain is a faithful friend to inform us of any ailment in any part of our bodies. Our body politic is now in unusual commotion—in an abnormal condition; it is thought there are many ills to be remedied. Would it be wise, think you, in our government at Washington to order the wires to be cut, and the mails to be stopped, in order that the high officials at the Capital might enjoy the quiet and repose of stupor—the quiet and repose that neither sees the lightning flashes, nor hears the not far distant rumblings, in that portentous cloud, which is now gathering all around our borders? If it be unwise in the one case, it seems to me it would be in the other also. It seems to me to be reasonable and proper that the entire nervous structure should be untrammeled, and kept in a condition fitted to perform its functions "in the formation, development and preservation of the individual." It should be free to give intelligence of the wants and sufferings of our patients. That is an important part of the work which nature wisely designed for it to do—to furnish the necessary vitality and to notify the individual of any disturbance in the complex machinery of the animal economy. The old doctors used to talk a good deal about the recuperative powers of nature. Where do you find these recuperative powers, if not in the nerves and their centres? The *fashion* of the present advanced (so-called), medical science, is not to *arouse*, but to put to sleep this wonderful apparatus which was intended as a perpetual guard, whose business it was to sound the alarm at the approach of the enemy. The first aim of the doctor now seems to be to capture these garrulous watchmen—to imprison and gag them, so that they shall do no work and tell no tales. Again, I ask, is it wise to do so? Nature cures

disease by means of her mysterious vital action, and the doctor should place no restrictions on her efforts.

Common sense—that is, reasonable sense—is better than *much* book learning. Common sense *is* learning, acquired by patient observation and reflection, imprinted on the brain, and is ready for reference at any time. Much book lore tempts a man to rely more on authority than on his own judgment; and relying on authority prompts him to catch at and make a panacea of every new remedy. He must keep up with the advanced strides of the profession; and to do so, he forgets all that is behind, and presses on to that which is before—no faith in anything that is old—no conservatism; is prepared to believe that all things are new, but does not *hold fast* to that *which is good.*

To assist nature, in a common sense way, in the cure of disease, we should use every conceivable means to keep our patients *comfortable.* Is he too full of blood? Then reduce the quantity, either directly, as by opening a vein, or by cups and leeches; or indirectly, by purging, sweating, abstinence from food, etc. Is he too cold? Then warm him. If too hot, cool him. Has he too little blood? Give him nutritious food, tonics, etc. I say when he is too hot, cool him, and do so by the simplest, cheapest, safest, most natural, pleasant and reasonable way, with cool or cold water and ice. I am aware there is a prejudice against the use of this incomparable remedy, so bountifully supplied and so urgently called for by the suffering fever patient.

Some eminent M. D.'s not having a common sense diary to which they can refer, have ascertained through the modern journals that whiskey, and some other more poisonous drugs, are *antipyretics*—that they will reduce the heat of fever, and will make a man cold. Well, I admit that *antipyretic* is a learned word; it is not so common-place and vulgar as cold water; the mere sound of the word implies great learning in—somebody. I also admit that these antipyretics frequently have the effect of lessening the heat of the human body, and *sometimes* to make it so cold as to place it beyond the reach of remedy, for *medicamenta non agunt in cadaver.*

In fever, we need something to reduce the morbid heat; and common sense, taking no cognizance of the Greek alphabet, says it is as reasonable to cool a man who is too hot as it is to warm him when he is too cold; and the cravings of instinct demand ample draughts of cold or cool water; and the burning skin is often immensely benefited by the direct application of cold water to its surface, to be continued until the heat is reduced to a *comfortable* standard. Consult your patient's feelings, and stop when he says enough.

I practiced on the above plan for forty years, and never had cause to regret the free use of ice and cold water in fevers. I cared not what name you gave the fever, if the patient were too hot, and wanted the cold water, either to drink, or to be applied to any portion of the body, I allowed it *ad libitum*.

I have been induced to write the foregoing from the conviction that it may sometimes be necessary, for the conservatism of age, to let down the breaks when the enthusiasm of youth has put on too much steam, and seems to be progressing rapidly and recklessly. *Festina lente* should be our motto. Hasten, but hasten slowly and cautiously. Our patients have entrusted their lives to our keeping; and while we are handling tools with such exceeding sharp edges, we should not do so heroically nor recklessly; for ofttimes the slightest mistake or error may prove fatal.

ART. V.—**Eye Troubles of Reflex and Neurotic Origin.*** By JOSEPH A. WHITE, M. D., Senior Surgeon to Richmond Eye, Ear and Throat Infirmary; Secretary of Section on Opthalmology Ninth International Medical Congress, etc., Richmond, Va.

Prognosis in *eye troubles* frequently depends on a just appreciation of the various influences which contribute to produce or aggravate them. It is well known that a large class of these troubles are produced by distant organs and by various nervous conditions; and the dependency of a rational treatmeant on such influences can be best appreciated by classi-

*Read before the North Carolina Medical Society.

fying the most important conditions of the eye which occur in this way.

As the *result of troubles about the "circulatory system,"* we have, pulsation in the retinal vessels, retinal hæmorrhage, retinal detachment, thrombosis, embolism, infarctus and neuritis, from *hypertrophy of the heart and mitral disease;* retinal hæmorrhage and intra-ocular hæmorrhage; from atheroma; hæmorrhage, embolism and neuritis, from anæmia, chlorosis and leucæmia in the malignant forms.

Gout gives us conjunctivitis, iritis, retinitis, etc.

From *trouble of the kidneys*, we have retinitis, papillitis, retinal hæmorrhage, detachment of the retina, hyalitis, glaucoma and nerve atrophy as the result of *albuminuria*; and cataract, neuritis, iritis, retinitis and retinal hæmorrhage, resulting from *diabetes.*

Troubles of the *ailmentary canal and digestive system*, result in corneal diseases and lenticular degeneration from *dentition*; reflex troubles, myosis, mydriasis, amblyopia, etc., from *dental caries*; pupillary defects and amblyopia from *worms and tape worms;* cataract from *dyarrhœa and dysentery;* retinal troubles from *hepatic congestion and icterus*, etc.

Uterine and ovarian troubles give us all kinds of retinal lesions and reflex symptoms about the eye and its muscles. In *pregnancy*, because of the feeble or high tension of the blood vessels, the presence of albumen, the excess of fibrine, and the reflex irritability of the nervous system, etc., we have the same results as in chronic albuminuria—retinitis, hyalitis, neuritis, hæmorrhage, embolism, amblyopia and uræmic amaurosis.

If I have left out troubles that produce eye symptoms, I have said enough to show the wide territory covered by a diagnosis of eye disease if sufficiently accurate to give an intelligent prognosis. The dependency of such troubles upon distant organs and affections, is a subject so well known to you all that I will not dilate upon it, but will confine this paper to "*eye troubles of reflex and neurotic origin.*"

Such reflex troubles occur as the result of different influences on both the *trifacial* and the *sympathetic*, whether direct or indirect.

1st. In the domain of the *trifacial*, we have reflex troubles from the eye, teeth, nose, etc.

2nd. In the domain of the *sympathetic*—from irritation of its cervical branches, and from the digestive and sexual organs, and lastly, neurotic troubles in connection with hysteria and neurasthenia.

It is important in starting out to dismiss from consideration all eye troubles, asthenopic, or otherwise, due to refractive errors; they must always be carefully distinguished from purely reflex and neurotic disorders. I will also dismiss reflex opthalmitis or sympathetic ophthalmia, transmitted from one eye to the other by the ciliary nerves, because this is a subject of every day discussion.

1st. Reflex eye troubles, in the *domain of the branches of the trifacial* or fifth pair of nerves, constitute quite an important chapter in ophthalmology. The *ophthalmic branch* of this nerve anastomoses about the cavernous sinus with branches from the sympathetic and all the motor nerves of the eye, hence its branches are a ready mode of transmission of reflex influences from any organ dominated by it.

Maxillary branches.—As to the influence of the teeth in producing reflex eye troubles, it is a theory familiar for generations. I frequently hear of physicians having attributed some disease of the eye to the fact that the so-called *eye teeth* were drawn, and very recently have seen a patient, who, by the advice of her doctor, had her eye teeth extracted in an ineffectual effort to get rid of an eye trouble not at all attributable to reflex influences. Whilst such empirical treatment is to be condemned, the theory of the reflex influences of the teeth on the eye, is a scientific one, physiologically demonstrable and clinically proven by undoubted facts. You are all familiar with the old theory of Travers and Frick, as to the production of strabismus by the disturbances of dentition. Whilst Donders' elucidation of the etiology of squint his knocked the props from under this theory, it is still held by many physicians. Delestre in 1870, published an essay on the accidents following extraction of the teeth, and among them were recurrent conjunctivitis with secretion, ciliary neuralgia and blepharospasm, which he attributed to transmitted irritation from the dental to the ophthalmic nerve.

Dr. Schmidt, of Berlin, examined 92 cases of dental caries to ascertain its influence on the accommodation of the eye. Only 19 had good accommodation, and the defect was more noticeable in young subjects between 10 and 20 years of age. In only 8 cases was the clinical demonstration of such influence made by the extraction of teeth, and five of these made a rapid and perfect recovery. This influence may be either purely reflex, or due to general depression of the nervous system from diseased teeth. Demarres reports a case of mydriasis which recovered when a carious tooth was removed. Weinberg, a case of exophthalmos with glaucoma symptoms which made a perfect recovery three days after extraction of the diseased teeth. Here the conjunctivitis was probably due to paralysis of the vaso-motor system, with passive dilatation of the capillaries; whilst the protrusion of the eye was attributable to relaxation of the peri-orbital muscle (Turner's), of the recti, and of the vascular and lymphatic system of the retro-ocular region, from the reflex influence of the diseased teeth.

Dr. Ely, of New York, has reported three cases of ptosis and blepharospasm cured by the extraction of teeth. Von Græfe and Weir Mitchell have also recorded similar cases. Mr. Henry Power reports a case of anæsthesia and abscess of the cornea treated without result until attention was called to diseased teeth and they were extracted.

Sir Wm. Lawrence and Galozowski, record a case of special interest in this connection. The patient, 20 years of age, was suddenly seized with terrible pain in the left temple and eye. The pupil dilated, and the eye became perfectly blind and insensible to light, whilst the ophthalmoscope showed a healthy fundus. The first molar tooth was sensitive and painful; thirteen months afterwards, the tooth was removed with perfect cure and restoration of vision in three days.

Mr. Power speaks of a case of loss of vision every time an attempt was made to remove caries from a molar tooth. Terrier, in 1876, reported reflex paralysis of eye muscles from dental caries. Mengin, in 1878, spasm of accommodation and contraction of internal rectus muscle. Redard, 1886, a case of amaurosis, with mydriasis and photophobia. Nuel

reports a case of reflex amblyopia from the teeth, and so on, *ad infinitum.*

That dreaded disease, glaucoma, has also been proven to have its point of departure in carious teeth, the lesion of the dental nerve causing irritation of the fifth pair, (Schmidt, Priestly Smith, Van Stippel, Grunhagen, and others.)

In all veritable reflex troubles of the eye of dental origin it is usually the molars that are at fault—generally caries complicated with abscess, and the teeth are more or less sensitive and painful.

Nasal.—Irritation of the interior of the *nose* also brings about similar reflex eye troubles. Since Dr. Daly, of Pittsburg, in March, 1881, first called the attention of the profession to the reflex influences of nasal affections much has been written on the subject in regard to asthma, hay fever, etc. This influence on the eye, whilst casually referred to, has not been much dilated on, although a moment's consideration shows the close nervous connection of the two organs. A slight cold in the head will often cause intolerance of light, and irritation of the eye is frequently productive of sneezing.

In my address before the American Medical Association, in New Orleans, I referred to a case of reflex conjunctivitis from nasal hypertrophy, which rebelled against all treatment until I had cured the nasal trouble.

Dr. Gruening, of New York, has reported a number of cases of reflex eye troubles from the nose. Whilst I have not met with as many typical cases as he has, my experience accords with his in this, that even where the progress of the case would be indicative of some reflex element, the patient will tell you there is nothing the matter with the nose. Here, as in other nasal neuroses, the demonstration is the production of or aggravation of the trouble by titillating the nasal structures, or its cure by treatment of the nasal affection. As an illustrative case, I will report one I have treated within the last four months.

A young lady from Lynchburg, suffered from constantly recurring pain in her eyes and inability to continue work; sometimes they would become inflamed without any appar-

ent cause. She was near-sighted, and several years ago I had tenotomized both external recti for weak interni with diplopia, and with perfect recovery. On re-examination, I found she was astigmatic and I attributed her painful asthenopia to the refractive error; its correction, however, did not materially help the case. Suspecting some reflex disturbance, I examined the nose and found the middle turbinated tissues hypertrophied. The galvano-cautery was thoroughly applied to the erectile tissues and she returned home. Six weeks after her father wrote me, stating that his daughter had had no trouble with her eyes since the operation on her nose, a result which was demonstrative of the correctness of the diagnosis.

Since then I have had a case of violent ciliary neuralgia in and around the eye-ball, with no pathological changes in the eye itself. Titillation of enlarged turbinated tissues brought on the pain and cauterization has temporarily at least, relieved it.

In this connection, Rampoldi, reports a very curious case. A woman with rhinitis and mucous polypi in the left nostril, had also conical cornea in the left eye. When the nasal trouble and polypi extended into the right nostril, the right cornea became conical also. This change was probably due to the vaso-motor interference with the corneal nutrition by the reflex influence of the nasal disease.

I have seen no recorded cases of amaurosis or amblyopia from nasal trouble.

Another class of reflex eye troubles we can find recorded even in the last century, and in the early part of this, those due to traumatic neralgias of the *frontal nerve*, when such neuralgias resulted from cicatrices involving the nerve filaments.

Two cases reported by Beer, are seemingly conclusive, where he cured amaurosis by cutting the supra-orbital nerve near its exit, because of the presence of painful scars in this location.

Prof. Phlueger, of Berlin, in 1881, reported a case of blepharospasm cured by excision of a cicatrix, and two others cured by elongation of the supra-orbital nerve.

Th. Leber, in 1880, published a case of this kind, which seemingly admits of no doubt. This case had photophobia,

blepharospasm, crossed diplopia and great depreciation of vision, as the result of an injury to the brow where the supra-orbital nerve was very tender to pressure. Morphia injections and electricity cured it in 15 days. Leber's explanation of the defective vision, (reflex amblyopia,) is that the powerful and painful excitation of the supra-orbital prevented the excitations of the optic nerve from reaching the seat of consciousness. (Theory of interference with centripetal innervation.)

Erb, however, in his "Treatise on Electro-Therapeutics," severely criticises this reflex theory of ocular paralysis, as in all his experiments to excite reflex action in the muscles of the eye by faradic excitation of the skin about the eye and and brow, he never succeeded; and he says that there is no physiological explanation of reflex relations between the skin of the face and the muscles of the eye. Probably such results are more strictly *hysterical* than *reflex*, in the light of Charcot's investigations; or constant suffering from neuralgia may so enfeeble the nervous system as to bring on nervous and visual disturbances.

Dr. Ayers, of Cincinnatti, (1886,) reports a case of ischæmia of the retina occurring in a young lady suffering from facial erysipelas, without implication of the orbital tissues, that might, if the reflex theory is tenable, be of neurotic origin, instead of being dependent on a general nervous debility resulting from erysipelas as supposed by him.

2d. *Reflexes in the Domain of the Sympathetic.*—Eye troubles occurring as the result of indirect influences upon distant branches of the great sympathetic can hardly be considered reflex in character, although strictly troubles of neurotic origin. As is well known, irritation of the sympathetic, may cause paralysis of the pupil, (myosis,) diminution of the palpebral aperture, sinking of the eye-ball in the socket, etc.

Rampoldi, reports several interesting cases of the result of irritating the cervical branches of the sympathetic. A boy with scrofulous adenitis of the neck developed ulcers of the cornea; a girl had a cyst removed from the neck, and ptosis and myosis followed on the same side; another case with scrofulous adenitis, developed ptosis, myosis and ulcers of cornea on the same side with the affected glands.

Reflexes from the Digestive Organs.—Of these troubles we have well authenticated cases resulting from the presence of worms in the stomach and intestines (ascaris and tænia). Of early reports we have those of Petrequin, Deval, Mackenzie and Devaine from ascaris, and Wawruch from tænia.

In 1865, Dr. Molard, in France, reported a typical case of a soldier, 27 years of age, who had violent pain in and around the eyes, with dilated pupil perfectly irresponsive to light, and one eye blind, the other nearly so. Two months after, he passed a tape-worm with immediate and complete recovery.

Rampoldi, in Italy, to whom I have before referred, has reported various cases: One, a child 7 years of age, with accommodative asthenopia; another, 5 years, with blepharospasm; a third, with nystagmus and amblyopia; a fourth, a child of 6, with tic of eyelids and recurrent amblyopia—all of whom were entirely cured after passing worms. Another case, a girl of 22, went blind suddenly in the left eye, followed in three days by pronounced amblyopia of the right. Left pupil was widely dilated and immovable; right partially so. The ophthalmoscope showed ischæmia of the retina, with dilated veins. She had sharp lancinating pains at all the points of exit of the fifth pair. Five days after, she passed part of a tænia and vision became entirely normal. This case was evidently a reflex neurosis from the stomach, as the symptoms subsided when the worm had passed farther down the intestinal tract.

Dr. Wm. G. Eggleston, of Chicago, in 1886 reported a case of reflex paraplegia with alternating strabismus from tænia.

In these cases, the absence of special changes about the eyes, and the results following the treatment of the intestinal trouble, would indicate the accuracy of the conclusion that the eye symptoms were reflex in character. Moreover, the conclusion is the more probable, as intestinal irritation is known to give rise to reflex cardiac disturbances and vasomotor changes extending over a large territory.

Reflexes from the Sexual Organs.—That the sexual apparatus is a rich fountain of reflex eye troubles is universally admitted, and from the number of recorded cases seems to be

demonstrated. Blepharospasm, diplopia; paralyses of the ocular muscles, both internal and external; functional irritation of the retina; painful asthenopia; loss of vision, varying from partial to complete blindness; violent recurring pains in and around the eye, etc., have been reported again and again as reflexes, dependent upon some pathological condition, or abnormal irritability of the sexual organs in both male and female.

The special sexual causes of such reflexes have been recorded as, masturbation in both sexes, especially in young subjects, the advent of puberty, the menopause, chronic ovaritis, parametritis, metritis, endometritis, flexions, versions, laceration of the cervix, excoriations, and all the anomalies of menstruation. The important part played by the sexual apparatus in the physical organism, and its preponderating influence in the pathology of the entire system, especially in the woman, makes it a considerable factor in the diagnosis of alterations in and about the organ of vision, proceeding from extraneous causes.

No fact is better established in medicine than that many such alterations either develop or are aggravated by the advent of puberty, the return of the catamenia, or the coming of the menopause; and this "sympathy," as it is called by some, is shown more markedly in the presence of decided pathological changes in the sexual apparatus. As Mooren says, "According to the combined evidence of the whole medical world, the majority of physiological and pathological phenomena in women depends on the functions of the uterine system." And the eye is no exception to this.

This influence of the sexual organs on the eye is also applicable to men.

Dr. Beaver, of Reading, Pa., in 1886 reported a case of a young man, 19 years old, who had reflex hyperæsthesia of the retina, with painful asthenopia from a stricture of the urethra, the result of masturbation. The evil effects of this habit on the eye are, however, oftener due to a direct impression on the nerve-centres as a result of the frequent periodic excitement of the nervous system. When no general disturbances are observed, and only some local trouble of a distant organ

is manifested, it is probably a reflex impression, transmitted through the spinal nerve-centres to the reflex centres at the base of the brain. Mavel (1853) reports the first case of this kind I am familiar with—a boy, 13 years old, who had reflex ptosis, cured in nine days by cessation of the habit.

Cases of retinal irritation (photopsia), of retinal anæsthesia hyperæsthesia, and amblyopia of reflex origin from the same cause, have been reported by Dieu, Arens, Cohn, Mooren and others, in both male and female, where amelioration or cure followed cessation of the habit.

Another cause of reflex irritation from the sexual organs is *phymosis; e. g.*, the case of alternating strabismus with paraplegia, reported by Dr. Eggleston in 1886, which was cured by the operation for phymosis.

In *menstrual disturbances* and in *uterine and ovarian troubles* we have numerous records of their reflex influence in producing ptosis, paralysis of ocular muscles, blepharospasm, irritation anæsthesia and ischæmia of the retina, painful asthenopia (kopiopia hysterica), and amblyopia. Cooke's case (1850), of a girl with amenorrhœa and ptosis which disappeared each time she menstruated; Jouanolou's (1873), of ocular paralyses and ptosis from suppression of the menses; Meyer's (1874), of a woman who became blind several hours before each menstruation; Hasner's (1883), of another who had paralysis of the ocular motor with each menstruation; Bloding's (1883), of one who became strabismic with each pregnancy; Mooren's (1884), of one with hyperæsthesia of the retina and loss of vision from a parametric deposit, and cured by its absorption; Williams' (St. Paul, 1884), of sudden blindness from an early appearance of the menstrual flow during typhoid fever; Ayres' two cases (1885), of retinal anæmia and amblyopia, one from prolapsus and the other from sudden suppression of the menses; Priestley Smith's (1884), of retinal hyperæsthesia, peri-orbital pains and amblyopia, cured by Battey's operation; Nuel's (1886), of amblyopia from prolapsus, are all cases in point.

In this connection I will give you a short report of a case I have seen recently and still have under observation:

Mrs. C., of Tennessee, came to me about two months ago

suffering from most intense periodical pain in and around the right eye ball. The pain was so great and frequent as to make life almost unbearable. During the attacks photophobia in both eyes was a marked symptom. The eye had a cataract, pretty well advanced, from a congenital defect in the lens (posterior polar cataract). Field of vision was normal, and with a well dilated pupil she could make out large letters through the cataractous lens. An oculist in Tennessee had suggested glaucoma as the probable cause, and advised enucleation to relieve the pain and protect the other eye. I told her the eye was practically healthy, and that an operation upon it would give no relief, as the pain was of *reflex* and not *local* origin. Upon questioning her, I found she suffered from chronic endometritis, uterine and ovarian pains, with profuse, too frequent and painful menstruation. I ascribed the trouble to this cause. She went on to consult Dr. Knapp, who made out the same diagnosis. Within the last few weeks she has seen Dr. Taber Johnston, of Washington. His opinion was that she could not be cured of her trouble without the removal of the ovaries and tubes, should she survive the operation.

Both Dr. Knapp and Dr. Johnson each made this diagnosis, as myself, without any knowledge of a previously expressed opinion, and whilst the demonstration of its accuracy remains to be had, this unanimity of opinion without consultation would tend to prove its correctness.

Whilst speaking of eye troubles reflected from the sexual organs, it would be well to mention that Mooren states his experience teaches him that when a woman cannot work with her glasses, in the absence of local cause, there must be some reflex influence underlying the asthenopia.

In the consideration of this subject I wish also to call your attention to the fact that it is very difficult to draw the line between what might be denominated as purely *reflex* troubles and what might be only local expressions of a general nervous diathesis, otherwise classed as neurasthenic or *hysterical*. Possibly the only proper separation is to designate cases of this kind "reflex" where other indications of hysteria, so called, are absent, and we can locate positively a pathological condition or change about some distant organ likely to produce reflex (vaso-motor or vaso-dilator) influences; and those

cases "hysterical" when either well marked symptoms of hysteria present themselves, or, in their absence, when such apparent reflexes cannot be traced to any discoverable cause. Here the line of separation will be overlapped one way or the other in many cases which may be complex in their etiology. Even where the trouble is clearly and demonstrably *reflex*, I believe that there is always in such cases an underlying *nervous diathesis* akin to or productive of *hysteria*, proven by the fact of this abnormal irritability of the reflex centres. If not, why should the same trouble be productive of reflex influences in one and not in another? And why is it that only a small minority of such cases are subject to such influences? Because this nervous excitability—this abnormal irritability of the nerve centres underlying the neurotic tendency—is limited to certain organizations only. Moreover, it is a well-known fact that reflex troubles of all kinds are more marked in hysterical subjects than in others.

The work of Charcot and his pupils, in relation to the pathogeny of hysteria and hystero-epilepsy, is already placing these heretofore rather mysterious maladies upon a firmer diagnostic basis, with a more definite symptomology; and, in consequence, many so called reflex troubles will be recognized as merely symptoms of hysteria.

The first record of hysterical eye trouble was a case of amblyopia, recorded by Hocken, in 1844. Since then such records have been numerous. Among these are the cases of Dr. Williams (Cincinnati, 1875), of a young woman who suddenly lost her vision, without any discoverable cause, local or distant; Dr. Strawbridge (Philadelphia, 1875), of hysterical blepharospasm, cured by forcible elevation of the lids with rubber bands (moral effect); Terson (1878), of a young woman who began to menstruate eight days too soon, had a sudden hysterical attack, became unconscious, and when she recovered was blind,—electricity in ten minutes restored vision; Manz (1880), of a case of hysterical contraction of eye muscle and spastic strabismus with amblyopia; Ulrich (1882), of a similar case; Noyes (1882), of a case of a man, 56, with retinal anæsthesia and sudden blindness which lasted twenty-four hours,—in five minutes inhala-

tion of nitrite of amyl restored vision; Mooren (1882), of a number of cases, in an article on the relation of uterine and eye troubles; Willbrand (1882), of many cases, in an exhaustive treatise on neurasthenic asthenopia; W. Adams Frost (1884), of a case of congugate deviation of the eyes down and to the right, which disappeared under ether and under a pressure band, to return when the bandage was removed; G. C. Harlan (1884), of a case of hysterical blindness (retinal anæsthesia) and blepharospasm—cured by mettallotharapy (mental impression); W. Meyer (1885), of hysterical blepharospasm—cured by a drop of cocaine; S. C. Ayres (1885), of sudden loss of sight in left eye, without assignable cause,—cured by bromide of potash.

The commonest hysterical eye troubles are, probably, so-called anæsthesia or hyperæsthesia of the retina (according to Steffan, two stages of the same condition), and paralysis or spasm of the ocular muscles, both external and internal, productive of myosis, mydriasis, blepharospasm, ptosis, strabismus, diplopia and asthenopia. In relation to anæsthesia retinæ, so called, much has been written, especially by Fœrster (in Græfe-Sæmisch) and by Willbrand.

The former calls one form of it *kopiopia hysterica* (painful asthenopia by others), in which the patients do not complain so much of defective vision as of intense pain and intolerance of light, and is characterized by extreme tenacity. The pains are located in and around the eye, come on without apparent cause, and last hours or days. The photophobia is intense, especially for artificial light. This affection seems to wear itself out. There is a cessation for some days; then another attack—in women, especially about the menstrual period.

Men have this trouble as well as women; but it is more frequent in the latter, especially in maiden ladies of "d'un" "certain age" and in sterile married women. This affection is incurable by any known treatment. The subjects of it usually manifest other hysterical symptoms.

Willbrand, in an exhaustive article on "Anæsthesia Retinæ," objects to the name and adopts Beard's nomenclature, calling it "Neurasthenic Asthenopia," which seems to be a tautology. Neither name exactly conveys an idea of the oc-

ular trouble. Willbrand says, "The condition is characterized by symptoms related not alone to the optic nerve, but, by analogous and equally important ones, related to the entire nervous system. These symptoms are partly vicarious, and partly affect, simultaneously, different organs of the same individual, quickly changing their locality and sometimes quickly disappearing.

Now the pathological explanation of all these symptoms is one and the same. The symptom we have become accustomed to regard as generally characteristic of anæsthesia retinæ is, like "kopiopia hysterica," simply a local manifestation of that nervous diathesis which, according to Beard, is essentially an impoverishment of nerve-force, dependent upon an excessive waste of nerve tissue.

Most other writers on the subject—Leber, Rudolph Arndt, Abadie, Perinaud and others—retain the name because it is understood; but Nuel suggests another name, "asthenopie nevroptique," which I would translate "neurotic asthenopia." The trouble is characterized by an entire absence of opthalmoscopic symptoms in nearly all cases, and where any can be detected, it is usually only a slight pallor of the disk, ischæmia retinæ so called.

Bernheim, of Nancy, does not believe that such an affection as hysterical amaurosis exists. He says the cases can really see, but imagine they do not. In other words, the blindness is psychical, not physical—rather a loss of visual memory. This, however, is disproved by Charcot's experience in hypnotism.

This affection is seen in the child and the adult—in the most vigorous man as in the feeble, nervous woman. It is brought about by influences the most diverse—violent emotions, acute and chronic maladies, traumatisms, etc., which seem to be the starting point of the nervous influences that produce it.

The muscular eye troubles in hysteria, as above referred to, can be present with or without the amblyopia or retinal defect. Spastic strabismus of hysterical origin can nearly always be determined by anæsthetizing the patient. For if it disappears it will show that it is not a *real* contraction of

the muscle; although this sometimes happens in the strabismus due to hyperopia, the presence of other hysterical symptoms will determine the diagnosis between these two.

Again, *intermittent diplopia* is always of hysterical origin. The very first symptom of hysteria and hytero epilepsy is frequently an affection of the ocular muscles, the others developing later on.

Prognosis in reflex troubles is always favorable; in hysterical developments it must be very guarded.

Treatment.—The treatment of these various reflex and hysterical eye troubles varies according to the causation and the temperament of the patient. It is simple enough when the reflex cause is clearly proven, or when there is any pathological change sufficient to produce the nervous complex of symptoms known as hysteria. It is to cure the primary cause; at the same time, the local effects on the eye frequently require special treatment or medication.

Bromide of potash, according to Mooren, is the most reliable remedy in the presence of *hyperæsthetic* symptoms. If the ovary is affected atropine should be given internally. Coffee and strong light should be prohibited, and blue or smoked glasses can be worn.

If the amblyopia is pronounced, hypodermic injections of strychnia have proved most reliable.

In view of the vaso-motor theory of reflex and hysterical eye troubles, it is recommended to apply the constant current to the great sympathetic and to the spinal column.

Metallotherapy also is worthy of trial according to Burq, Charcot, Abadie and others. Gold, silver, copper, etc., may be tried, applied to the forehead during the night and held in place by a bandage.

Papine for Dysentery.

Prof. S. E. Woody, of the Kentucky School of Medicine, said (April 8th) that papine was used in a case of acute dysentery of unusual severity, requiring unusually large doses of opium. The effects were purely hypnotic and anodyne, and no other form of opium was used during the entire illness. "Papine is a pharmaceutical triumph."

Clinical Reports.

Puerperal Eclampsia—Treatment with Morphia and Chloral, etc.—Preventive Treatment—Remarks. By R. H. GARTHRIGHT, M. D., Blossom Hill, Princess Anne county, Va.

What is calculated to alarm the physician in attendance upon a parturient woman more than symptoms of an approaching convulsion? Sometimes the case seems to be progressing satisfactorily, when, to his astonishment, paroxysms of eclampsia are ushered in, and the patient, instead of becoming a happy mother, is soon lifeless clay. Or, perhaps the pains of labor have ceased. There is joy in the household, "because a man is born into the world." The doctor is congratulating himself upon the excellent condition of his patient, when the muscles of the face are seen to twitch. Soon the whole body begins to jerk; the features are distorted, the eye-balls protrude, the mouth foams, consciousness vanishes, and death seems anxious to claim a victim. The following cases may not prove uninteresting:

Case I.—Called at 2 A. M., May 5, 1887, to Mrs. S., in her third confinement. Arrived half hour after birth of child. Was told by the nurse that patient had had three spasms—two prior to birth of child, and the third afterwards. A slight convulsion occurred soon after my arrival. I found her flooding. Introduced hand into uterus, poured several gallons of cold water over abdomen, and administered two drachms of fluid extract of ergot. Uterus contracted readily. Gave small dose morphia, and left patient in about one hour in a quiet condition. Kept her slightly under influence of morphia and chloral for several succeeding days. She recovered without a return of any signs of convulsions.

Case II.—On the afternoon of October 7th, 1886, I received a message to visit Mrs. R. L. Went in great haste, and found the patient—a robust, healthy lady, aged 20 years—semi-comatose. Was told that she had a convulsion just before I reached the bed-side. She was a primipara, and had been in labor seventeen hours. The midwife, in whose hands she had voluntarily been placed, would not consent to have a physician called until after the patient had had several violent convulsions, saying, "It will all end right presently; a doctor can do no good," etc., as usual. Ex-

amination showed a thoroughly dilated os uteri. First position of the vertex. Before removing my hand from the vagina, I ruptured the bag of waters; then gave her fifteen grains chloral hydrate, with the same amount of potassium bromide, and repeated the dose fifteen minutes later. An enema of cold water and spirits of turpentine was then administered. In about half an hour afterwards I gave her one drachm fluid extract of ergot. About this time she was again attacked with a most fearful convulsion. Her features were dreadfully distorted; eye-balls protruding; her breathing was stertorous. During this paroxysm she thrust her tongue between her teeth and bit it deeply, so that blood ran freely from her mouth. A small dose of the bromide-chloral mixture was administered every fifteen or twenty minutes. She had two more convulsions before 8 o'clock—three hours after my arrival—and then gave birth to a large, well-formed child—11 pounds—and immediately thereafter became comatose. Fifteen minutes later I removed the placenta. This operation aroused her, and she spoke intelligently, and swallowed a dose of ergot. Before the lapse of many minutes another paroxysm occurred; two hours later still another.

I continued giving the same mixture—chloral hydrate and potass. bromide—with regularity. At midnight she had three convulsions in rapid succession. Added a small quantity of morphia to the mixture I had been giving. Breathing still stertorous. Another fit at 2 A. M. Administered ¼ gr. morphia hypodermically, when she immediately became more quiet, and breathed with greater facility. Was attacked with another convulsion at 4 o'clock A. M., but this one was not as violent as were the others. Gave morphia again. This was the last paroxysm. The mixture of morphia, chloral and bromide was continued at intervals of two hours all through the following day. That afternoon I found her calm and quiet and cheerful. She had a good "getting up."

It will be observed from the above that improvement began immediately after the hypodermic administration of morphia. Evidently this accomplished more good than did any other of the agents employed.

On referring to the literature of the subject under consideration, I notice that many accoucheurs recommend the use of morphia in the treatment of puerperal eclampsia. Dr. William C. Dabney, Professor of Obstetrics, etc., University

of Virginia, considers it an exceedingly valuable remedy. He asserts that he has seen it stop the convulsions when other agents—viz., chloroform, bromides, chloral, etc.—had been administered seemingly without benefit.

When, and under what circumstances, should morphia be employed? Should it ever be given prior to the expulsion of the child? This depends upon circumstances. If the os uteri is thoroughly dilated, and labor pains are regular, my brief experience teaches me to push chloral and the bromides until the child is born. But if, on the other hand, this state of affairs does not exist, if the convulsions are frequent and violent, and death seems impending, no physician of experience would probably hesitate to give morphia, notwithstanding the danger of narcotizing the child. The life of the mother is of more value than that of the infant. Save her by all means, if possible.

Dr. W. Tyler Smith says this agent should never be given a plethoric woman for eclampsia until after she is thoroughly bled; then it can be administered with decided benefit. He thinks it an excellent sedative in anæmic women who are attacked during labor with convulsions. Such patients he never bleeds.

Dr. Loomis, of New York, considers the hypodermic injection of morphia the most important agent that can be employed in the treatment of puerperal convulsions of the uræmic variety. Scanzoni used it. It establishes diaphoresis and helps the action of diuretics and cathartics. Muscular spasms are arrested by the hypodermic administration of this drug, by counteracting the effect of uræmic poison on the nerve centres. [Loomis.]

Now, a word concerning preventive treatment. It is hardly necessary to remark that it is important that every parturient woman be kept quiet; and if she possess a nervous temperament, everything calculated to produce excitement should be carefully avoided.

That puerperal convulsions are sometimes occasioned by albuminuria, no physician of the present day will probably deny. As regards the frequency of this condition in pregnant women, obstetrical writers differ. The average may

be put at 18 per cent. It is to be deplored that such a large number of *enceinte* women do not receive medical treatment before the day of labor comes upon them. Every physician should seek to impress upon his patients the importance of attending to this state. Delay has often proved fatal. A word spoken in season may result in prolonging one life—perhaps two lives—and in preserving the happiness of a family. Their expressions of gratitude will abundantly remunerate him for the faithful performance of his duty.

The remedies mostly employed for the removal of albumen from the urine of pregnant females are warm baths, diuretics—acetate and bitartrate potash, etc. Bromide of potassium has been administered with decided benefit. Chloral hydrate is warmly advocated by some. Tarnier and Nœggerath speak in the highest terms of a skimmed-milk diet. Donkin has observed beneficial effects from its use.

I will close this paper with a case of albuminuria of pregnancy:

Mrs. L. B , primipara, aged 24 years, was seen by me May 19th, 1887. Eight months before that date menstruation ceased. Other symptoms of pregnancy followed. At the time of my first visit, she was pale, anæmic, and her entire body swollen. The lower extremities especially exhibited a very œdematous condition. Breathing was difficult and cough harassing. I directed that all the urine voided in twenty-four hours be kept. This was done, and at the end of that time I visited her, and ascertained that she had micturated about the normal quantity. A specimen was taken to my office and analyzed, and found, as was expected, to be loaded with albumen. She suffered then with constipation. I gave her a small dose of calomel and Dover's powders, also acetate potash, in ten grain doses, three times a day. The potash had to be discontinued in a few days because of the nausea it occasioned. In its stead I gave the following:

℞. Tinct. scillæ.....ʒvj
Infus. digitalis..... .... ʒiv
Syr. ferri iodid.....ʒj

M.—Sig. Teaspoonful every six hours in water.

This prescription acted charmingly. The swelling abated considerably, and she expressed herself as feeling comparatively comfortable. An occasional dose of calomel was ad-

ministered. Ordered warm baths. A few weeks of this treatment caused the dropsy to disappear entirely. On examination I found no signs of life in the fœtus in utero. A short time after this, symptoms of labor came on. They were off in a few hours, however; and thinking it dangerous in her debilitated condition to induce parturition, I did not interfere. One week later she gave birth to a dead fœtus. Stood the delivery poorly, and grew fainter and fainter each day for a week or more. Had no appetite. Pains in abdomen and right limb. Constipated. Left arm became fearfully swollen, then the right leg. Gave small doses of calomel, opium when pain was intense, and the same diuretic that had been used prior to the date of parturition. Swelling left the leg and arm, but she continued to suffer with abdominal pains occasionally, which opium readily relieved. Gave stimulants, with nutritious, concentrated foods, with iron, strychnia, and arsenic (Fowler's solution). She began to improve slowly, and in six weeks was strong enough to walk across the room. Ten days later she went out each afternoon for a drive.

Cocaine Anæsthesia During Labor. By B. C. KEISTER, M. D., South Boston, Va.

I beg leave to report my first experience in the use of local anæsthesia during parturition: The patient was a primipara of 28 summers, whose general health was below par, and whose nervous system was almost exhausted from dread of the pending labor. The membranes had prematurely ruptured. She had been in labor about twelve hours, and with each pain a discharge of water followed. The pains were rapidly growing stronger, but were not very effective in dilating the os. The patient had become so nervous and weak that I had to resort to chloroform to keep her from going into convulsions. I kept her partially under its influence until the os had fully dilated. I had, up to this time, given about four ounces of Squibb's chloroform, besides a considerable quantity of chloral and morphine.

The patient was rapidly growing weaker and the pains growing stronger, and I feared she could not stand very much more chloroform. So I decided to try local anæsthesia by applying a preparation consisting of two parts of a four per cent. solution of hydro-chlorate of cocaine to six

parts of pure glycerine, to the vaginal walls. I made the applications with a vaginal syringe and a small piece of soft surgeon's sponge. Before making the application, I washed out the vaginal canal thoroughly with a six per cent. solution of carbolic acid and tepid water. I made five applications, allowing from twelve to twenty minutes intervals. After the third application, I left off the chloroform. The head of the child had descended into the vagina when I made the first application. I also applied the mixture to the perineum and vulva. The expulsion pains were long and severe, but the patient bore them without any chloroform, save a whiff or so occasionally to partially relieve the tension of the perineum.

Notwithstanding the large head of the child, the labor terminated favorably, and without any laceration, save a slight rent in the anterior wall of the vagina, which readily healed under the antiseptic wash that was prescribed for the vagina. The patient made a good recovery. I feel justified in stating that in my judgment the patient would not have survived her long and tedious labor had it not been for the local anæsthesia.

This has been my only experience with local anæsthesia in parturition up to this time. But I feel encouraged to make another trial when I have another case similar to the one above mentioned. But for the exorbitant price of cocaine, I think it should find its way into every practitioner's obstetrical bag. I know of no reason why the os of the urteus could not be anæsthetized by the same process as above mentioned, and alleviate the pain that so often exhausts a poor woman before the regular expulsive pains commence.

Strange, but true, there has been less advancement made in the science of obstetrics during the past half century than in any other branch of medicine. If a few of the great thinking minds of our profession could be aroused by the dying appeals of parturient women to the importance of giving them a part of the time and attention that is annually givên to microbes, bacilli, and "*water fleas*," I verily believe the suffering and mortality of parturient women would be reduced at least one-half, if not three-fourths. I refer more particularly to the sufferings and mortality of delicate and nervous women during labor. This class constitutes about

one-fifth of the child-bearing women of the United States, which is no small percentage when we consider that physicians' wives constitute a large percentage of this number.

I think the time is rapidly approaching when local anæsthesia, will supersede general anæstnesia, not only in surgery, but in midwifery. Local anæsthesia does not have the deleterious effect of checking the contractions of the uterus during labor, and in the third stage of labor it does not subject the patient to hæmorrhage. These are very important advantages in favor of local anæsthesia during labor over general anæsthesia.

I shall not proceed further into the details or merits of this important subject until I shall have had opportunities for more thorough investigation; and for the present will leave the subject for abler pens.

South Boston, Va., Oct. 4, 1887.

Two Cases of Fracture of Cervical Vertebra, with Recovery.

By JAMES BUCKNER LUCKIE, M. D., Birmingham, Ala.

Case. I.—Fall of Ninety Feet into Icy Water—Fracture of Spinous Process of Cervical Vertebra—General Paralysis—Bandaged or "Splinted" with Alcock's Porous Plaster—Perfect Repair, and Recovery of Strength and Health.

On the morning of the 9th of January, 1886, I was notified to proceed to the scene of a terrible wreck at Bridge 19, on the S. & N. A. railroad to attend the wounded. Before I reached the scene, however, the wounded had been brought down to Cullman, where I found them.

Among the wounded I found Engineer J——, of whom I have to write. He was on his engine when the bridge fell in, and went down with it a distance of ninety feet, plunging into the icy waters. When I found him he was suffering from shock, together with the results of exposure to the intense cold in his wet clothing. After giving him attention for the shock and the effects of his exposure to the cold, I proceeded to make a careful examination of his injuries.

I found several bruises, none of much importance, except one on his right shoulder; and I also found that the spinous process of the fourth cervical vertebra had been broken off nearthe body of the bone. In raising him up his head

would fall forward, allowing the chin to rest on the chest. There was a partial general paralysis, extreme nausea, and inability to void the urine. I gave hypodermatic injections of morphia to produce rest, and relieve the pain, and the usual mixture of lime water and sweet milk to relieve the nausea, (and also as nourishment.) I relieved the bladder with a catheter, and then proceeded to fix the head. Alcock's porous plasters were the most available dressings I could get at the time, (and I desire to say that I liked them so well, that I have used them frequently since in various fractures.) I shaved the back of the head for a couple of inches and applied the plasters, carrying then down the spine several inches below the fracture, and enjoined perfect rest. The patient was allowed liquid nourishment to be taken through a bent tube so as to prevent any motion of the head.

For several days it was necessary to relieve the bladder by the catheter; after four or five days, however, he was able to void his urine himself. It was also necessary for about the same length of time to give castor oil and enemata to move the bowels.

At the end of three weeks he was able to be moved to Birmingham. His recovery was slow, but steady. The spinous process was re-united to its vertebra, and at this writing (July 16th, 1887) the man is strong and healthy.

Case II.—Fall from Car—Fracture of Sixth Cervical Vertebra—Rupture of Ligaments—Concussion of other Cervical Vertebræ—Contusions over Lumbar and Sacral Regions—General Paralysis, but with Constant Rotation of Head—Blindness—Sayre's "Jury-Mast" and Plaster of Paris Jacket Treatment—Recovered so as to Walk with Cane.

Early on the morning of March 19th, 1887, I was hastily summoned to see B. Baldwin, age 33 years, switchman in the S. & N. A. R. R. yard at this place, who had been injured by a fall from the top of a caboose. I found him unconscious, with his head constantly rotating, pulse weak, breathing stertorous. I at once had him removed to comfortable quarters, and proceeded to examine his injuries.

I diagnosed a fracture of the sixth cervical vertebra with a laceration of the ligaments, and concussion of the other cervical vertebræ; also contusions over the lumbar region and sacrum, with concussion—all this resulting in a general paralysis except as to the rotating of the head. For thirty-six hours the head continued to turn from side to side without intermission; at the end of this time the head gradually ceased to turn, and the man began regaining his consciousness and could articulate. I then fixed the head as in Case I.

About this time I found that the man was completely blind, in which condition he remained for fourteen days when his vision began to slowly return.

All this time there was a constant dribbling of urine except when the bladder had just been emptied by the catheter. His bowels had to be moved by oil and enemata. Paralysis of the lower extremities began to yield slowly, as it did everywhere else except in the right arm. As the paralysis yielded, the dribbling of the urine ceased, and there was less trouble with the bowels. I kept the patient as still as possible leaving strict orders that his head should not be moved.

On May 13th, assisted by Drs. Copeland and Barcley, I applied "Sayre's jury-mast" and plaster-of-Paris jacket. These acted admirably, taking the weight of the head from the cervical vertebræ, and also keeping the head fixed in position.

At this writing, July 16th, the man is able to walk about with the assistance of a cane. The point of injury is extremely sensitive, and the patient cannot bear the least pressure on any portion of the cervical vertebræ. If the "jury-mast" is removed the head has to be supported—I do not think he could live without it. His general health is excellent, though paralysis of the right arm continues.

Correspondence.

Corn-Meal and Water for Boils.

Mr. Editor:—I have just read the interesting article in your journal (September number) by Dr. Wm. S. Stoakley on corn-meal and water for chills and fevers. I have heard of the same remedy being good for boils, etc., taken in the same way. Will some of your subscribers tell us how it is, and how far it is, a cure? ENQUIRER.

Glade Spring, Washington Co., Va.,
September 10th, 1887.

"CONSIDER myself fortunate in having found such an excellent remedy as *Tongaline* for the very troublesome disorders which it controls so thoroughly."—HENRY GREGORY, JR., M. D., Laurel, Franklin Co., Ind.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Simple Ulcer of the Duodenum. (By Dr. J. Comby.)

The classical works have paid little attention to this subject. Important chapters are devoted to *simple ulcer of the stomach*, which, prior to its masterly description by Cruveilhier (1830) was confounded with cancer, and had no history of its own. The time seems now to have come to do for ulcer of the duodenum what Cruveilhier did for ulcer of the stomach.

An eminent clinical master, Dr. Bucquoy, physician to the Hotel Dieu, has just given us, in an original and critical work, a veritable monograph on ulcer of the duodenum, which does not deserve to pass unnoticed. This lesion, in a great majority of cases, is discovered only at an autopsy. Sometimes it coincides with gastric ulcer, though often it is isolated. Regarding its pathological anatomy, little is known. As to its causation, the same theories are held as in gastric ulcer. Its diagnostic symptoms are of the greatest interest to practical physicians, for its diagnosis is difficult.

Its symptomatology, Dr. Bucquoy declares, is made up of deficiencies. The lesion may remain absolutely latent, and may reveal itself only by sudden perforation or terrible (fatal) hæmorrhage. These two formidable modes of termination may occur in subjects of duodenal ulcer, who are apparently in perfect health, the ulceration having progressed to the extent of a fatal termination without there being any evidence of the existence of an ulcer. In the cases observed by Dr. Bucquoy, the first important and significant symptom was intestinal hæmorrhage, the blood in the stools being always black and tarry in appearance. There may also be hæmatemesis, which indicates that the ulcer is situated in the first portion of the duodenum, and very near the stomach. The loss of blood from the intestine is sudden and copious, and occurs soon after a meal, and is accompanied by colic, and may be taken for an attack of indigestion. Cases have been noted where one single hæmorrhage was sufficient to cause death. In general, however, the hæmorrhages occur repeatedly, and bring the patients to the state of extreme anæmia, the skin and mucous membranes becoming absolutely colorless. Excessive pallor should suggest internal

hæmorrhage. It is a diagnostic element of value. The other symptoms of extensive hæmorrhages are vertigo, obunbilation, lipothymia, cold sweats, syncopes, etc. *Pain* has not the same semeiological value in duodenal as in gastric ulcer. It is far from being constant, and is variable as regards seat, duration, and intensity. It is most generally to be observed after a meal at the end of the period of stomach digestion, its seat being in the right hypochondriac region, between the short ribs and umbilicus, about the external border of the rectus muscle. It often extends to the epigastrium and over the rest of the abdomen, recalling the pain of acute peritonitis. Perhaps there may be reflex phenomena, neuralgias, convulsions, dyspnœa, and suffocation. The dorsal and xiphoid stops signalized in gastric ulcers have never been observed. Finally, the time of the appearance of the pain is to be noted; it is from two to three hours after taking food that the painful crisis makes its appearance.

The duodenal lesions alone, and free from any other complication, seem to exert no influence on the functions of either the stomach or the intestine. Vomiting is of frequent occurrence. It is due to nearness of the pyloric orifice. Perhaps it has as a cause a cicatricial contraction of the duodenum. Dilatation of the stomach might also result from the cicatrization of a duodenal ulcer. Dr. Bucquoy insists particularly that the subjects of duodenal ulcer keep their appetites even when they have violent painful crises. This is an indication that the cause is not in the stomach. As for icterus, its occurrence is exceptionable, and it has no semeiological value. The progress of the disease is slow and irregular, and shows exacerbations and remissions of variable duration. It terminates most frequently by perforation and consequent subacute peritonitis.

Dr. Bucquoy believes that the disease is curable. Only one of his five cases died.

The diagnosis rests upon the three kinds of symptoms—the intestinal hæmorrhage, the seat of the pain, and the digestive troubles. When these symptoms are grouped, they render the diagnosis probable, if not certain. The only thing to avoid is the confounding with gastric ulcer.

The best differential signs are the time of the appearance of the pain, its seat and characteristics, and the preservation of the appetite.

Ulcer of the stomach is most frequent in chlorotic females; ulcer of the duodenum is by far most frequent in men.

And finally, two conclusions as to diagnosis and treatment:

1st. When a male patient is taken suddenly with intestinal hæmorrhages, which tell nothing, and which cease after some time, and cause no other troubles than those of extreme anæmia, and then return again with the same characteristics at epochs more or less distant, as to the intervals, there being all appearances of good health, and rapid recuperation of the functions of the stomach, after hæmorrhagic attacks, demonstrate the integrity of that organ, there should be a strong presumption, if not certainty, that the hæmorrhages have their origin in a simple ulcer of the duodenum.

2d. The treatment differs from that of gastric ulcer, for the integrity of the stomach allows a liberal alimentary regimen, and, thanks to this, the patient can take sufficient varied nourishment to repair the damage done by the grave hæmorrhages.—*Le Progrès Med.*, Aug. 6, 1887.

Objective Signs of the Three Great Laryngopathics—Tuberculosis, Syphilis, and Cancer of the Larynx. (By Dr. Ariza, of Madrid.)

Tuberculosis.—Tumefaction occurs especially in the arytenoids, the epiglottis, and the inter-arytenoidean region, but also may be seen in the superior and inferior cords, producing glottic stenosis. The color of these tumefied parts is pale upon the summit of the arytenoids and upon the epiglottis, so long as there is no ulceration; in the intercalary regions it is rose; upon the superior cords, a dusky color; the inferior cords are a dirty grey, and irregularly injected. He has never found tuberculous ulceration upon the summits of the arytenoids, but at their base, at the insertion of the vocal cords, extensive ulcerations are sometimes to be found. Elsewhere, they are generally small and superficial. These ulcerations give rise to vegetations and excrescences, principally in the inter-arytenoid region, upon the ventricular bands, and also upon the vocal cords, alternating with depression, which gives to the free borders a serrated aspect. The lesions are bilateral and symmetrical.

Syphilis.—Tertiary syphilis of the larynx presents itself under two forms—the gummy, and the inflammatory or ulcerating. The gumma may be nodular or *en nappe.* The gummy nodule varies in size from that of a millet-seed to that of a hazel-nut. It is raised, rounded, and circumscribed. The gumma *en nappe* is more flat and extended, with a surface sometimes roughened, and seems as if fitted into healthy tissue. The color of gummata is yellowish, rose-color,

and sometimes red. Both forms ulcerate, giving rise to great loss of substance. This loss is cavernous in form, and greatest beneath the surface in the midst of the tissues. Tertiary syphilitic ulceration is a veritable lupus, which destroys the tissues, and may cicatrize on one side while it extends on the other. Generally the ulceration is extensive, the pus giving it a yellowish color; and it is impossible to cleanse it. The parts surrounding have a deep-red color and tumefied edges, and the tissue upon the side on which the ulceration is extending, œdematous. In general, there is only one point of ulceration, and at most two, the second being smaller, with the same characteristics. Its point of predilection is the epiglottis, or the lateral part of the vestibule. The characteristic which best differentiates it from other destructive processes is the ease with which it cicatrizes. In fact, cancer never cicatrizes; and though cicatrization may sometimes occur in tuberculosis, the spots are small and invisible.

The syphilitic cicatrices, whether of gumma or of lupus, may give rise to excrescences or condylomata, which are to be distinguished from those of tuberculosis or cancerous ulceration by their red color and their smooth uniform surface. The lesions are sometimes bilateral, but are to be distinguished from those of tuberculosis by absence of symmetry and by their peculiar characteristics.

Cancer.—Cancer has at first the appearance of a pimple, of a mammillated excrescence, generally of a dusky-red color, and darkest at the highest point, rarely pale. Always unilateral, it extends gradually. It does not attack the opposite side of the larynx, except by extension across the median line; and while it may invade the whole organ, it has never but one starting point. Ulceration begins at the highest point. It is sanious, sanguinolent, and bleeds spontaneously or on the slightest touch. It extends little by little, and caves in at some points and vegetates at others, and its borders are turned down. Its color varies; it is in places sanious, deep, or pink (dechiqueteé). Cancer is the one of all laryngopathies that produces most deformity of the glottis; in no other condition is there to be found such a pronounced obliquity of the glottic orifice.—*Revue Mensuel de Laryngol. d'Otologie et de Rhinologie*, July, 1887.

Abortive Treatment of Furuncle by Intra-Parenchymatous Injections of Carbolic Acid. (Conc. Méd.)

Furuncle is the result of the inoculation of the pilosebaceous follicles by a pyogenic micro-organism, the sta-

phylococcus aureus, and perhaps by others. Having proven by experiment that this microbe is killed by weak solutions of carbolic acid, M. Bidder made use of it in the treatment of commencing furuncle. He introduces obliquely into the tissue surrounding the incipient boil the needle of a Pravay syringe, which is filled with a two per cent. solution of carbolic acid, in such a manner that its point penetrates the centre of inflammation, which has already commenced to soften. He then injects some drops into the tissues, withdraws the needle, and performs the same manœuvre on the opposite side. If the boil is of large size, four injections should be made into it, and each should be half a syringeful of the solution. The injection should be made slowly. It is a little painful, but the pain soon ceases, and all painful sensation disappears from the part. Next, cover the spot with a carbolized compress and this with oiled-silk or gutta-percha. Generally, in two to three days in small, and eight to ten in the largest boils, all is over. It causes no suppuration, and cicatrices are avoided. *Le Practicien*, 4th July, 1887.

M. Jorrissenne, in a communication to the Médico-Chirurgical Société of Liège (*Le Progrès Med.*, Aug. 23, 1887), states that for some years he has used, with constant success, injections of a three per cent. solution of carbolic acid in the abortive treatment of furunculosis. He makes his injection into the centre of the furuncle. The pain caused is very great; and lately he has tried with equal success the application of an ointment of red precipitate. No matter what was used as an excipient, the use of the ointment was always successful, although it did not contain more than one per cent. of the active ingredient.

Special Alimentary Regimen in Diseases of the Stomach and Intestines.—(Dr. Dujardin-Beaumetz. *Bull. de Therapeutique.*)

1. *Cancer.*—For this disease there is no special alimentary hygiene. The dietetic rules are uncertain. Patients with extensive cancers have been known to preserve almost entirely their digestive powers. All depends upon the situation, kind, and rate of progress of the affection. One may allow himself to be guided by the desires of his patient, always requiring that the aliments, especially vegetables and feculents, should be taken as soup, or well mashed. The fatty and nitrogenous aliments are to be excluded, because in cases of cancer, the gastric juice has lost its hydrochloric acid, and in consequence its digestive properties.

2. *Round Ulcer.*—Here the milk regimen should be employed in all its strictness. Debove advises that at the same time there should be given 30 or 40 grammes of bicarbonate of soda a day, and Lucca (of Naples) advises that the milk be combined with lime water. Ordinary alimentation may be gradually returned to by commencing first with the feculents and then the meat powders.

3. *Chronic Catarrh.*—Here, again, the exclusive milk regimen. Milk combined with the alkaline waters, or with the addition of bicarbonate of soda. As this affection is nearly always caused by alcoholic excesses, it is necessary to deprive the patient of all alcoholic drinks. To help accomplish this, he may be given the fermented milks (kefyr, galazyme). There may be a gradual return to ordinary alimentation, following the different regimens instituted by Leube Finally, as long as he lives, the patient must abstain from all alcoholic drinks.

4. *Dilatation of the Stomach.*—The subjects of dilatation of the stomach are to be divided into two great classes—those who have diarrhœa, and those who are constipated.

(*A*) *Dilatation with Diarrhœa.*—Purely vegetable regimen, feculents in form of soup, well cooked vegetables, and stewed fruits. Bavarian or Pilsen beer, or malt beer. It is necessary to put a considerable interval between the meals, and to allow only 300 grammes of drink at each meal. The sulpho-carbonated water may be added to an antiputrid, according to the following formula:

℞. Sulphide of carbon, pure..... 25 grammes.
Spts. peppermint..... 50 drops.
Water.....400 grammes.

Put in a vessel of 500 c. c., shake well, and let stand. Be careful to add enough water to make the original quantity every time a dose is taken from the bottle. Dose 4 to 8 tablespoonfuls a day. Each spoonful should be added to half a glass of milk or beer.

(*B*) *Dilatation with Constipation.*—Roast meats, toasted bread, fruits, specially peaches and raisins, mild saline purgatives, the natural purgative waters, hydrotherapy in both cases.

5. *Dyspepsia.*—Dyspeptics are to be divided into three groups:

(1) *Dyspepsia by default of secretion of gastric juice.*—Meat in powder or pulp, and in quantity proportionate to digestive power of patient, bouillon, milk, mixture of milk and bouillon (Heryen), wine or water, with the addition of brandy.

(2) *Dyspepsia from exaggeration of secretion of gastric juice.*—Purely vegetable regimen (feculants, vegetables, fruits), milk, sometimes beer, never wine.

(3) *Dyspepsia with sympathetic troubles* (stomachal vertigo).—Exclusive regimen of feculents, vegetables, fruits, and milk.

As the purely vegetable regimen occupies an important place in a great number of diseases of the stomach, let us indicate in a few words the formula of this treatment:

(*a*) Bread crust or toasted bread.

(*b*) Feculents: Mashed potatoes, beans, lentils, corn-meal, chestnut-flour, oat-meal, barley-meal, maccaroni and vermicelli—all with or without butter.

(*c*) Vegetables: Vegetable-soups, well cooked salads, spinach, sorrel, fresh beans.

(*d*) Fruits: Baked and stewed, excepting raisins.

(*e*) Eggs: Very little cooked.

(*f*) Drinks: Beer in preference to wine.

Diseases of the intestine:

1st. Constipation: Brown bread, green vegetables, spinach, ginger-bread in large quantity, raisins, oranges and lemons, mixed with Vichy water. Drink a little flax-seed tea at meals.

2d. Diarrhœa:

(*a*) The milk regimen should occupy the first place, and will prove useless only in tuberculoos diarrhœa.

(*b*) Raw meat and meat powders in small doses to begin with.

(*c*) Peptones.

(*d*) Quinces and artichokes.

In infantile diarrhœa, milk and lime-water should form the basis of the treatment.—*L'Union Méd. du Canada*, Aug., 1887.

Proceedings of Societies, Boards, etc.

PHILADELPHIA PATHOLOGICAL SOCIETY.

Stated Meeting September 22d, 1887. The President, Dr. J. C. Wilson, in the chair. Reported by Dr. Wm. E. Hughes, Recorder.

Dr. W. Osler presented a specimen of *Thrombosis of the Portal Vein.* Chronic obstruction to the blood flow in the branches of the vena portæ within the liver, such as occurs

in cirrhosis, is probably the most common cause of this rare condition. We not infrequently meet with atheroma in the portal vein and its branches in cirrhosis, one factor in the production of which, as in the pulmonary artery in mitral stenosis, is the heightened blood pressure; and to this change the thrombus formation is closely related. At first, and possibly for a long time, mural, it gradually becomes obliterated, and if the collateral circulation is established, the patient may live some time, as in a case which I reported in 1882 (*Jr. Anatomy and Physiology*), in which the vein was represented by a firm fibrous cord. The specimen here shown was taken from a Swede, aged about 45, who was admitted to the University Hospital May 7th with ascites. As he could not speak English, it was difficult to obtain a history, but we ascertained that he had been in failing health for some time, and latterly his abdomen had become swollen. It did not appear to have come on suddenly. The liver dullness was reduced, the superficial abdominal veins were moderately distinct, and the case was regarded as one of ordinary cirrhosis. He was tapped five times between May 20th and July 14th, and from twelve to fifteen pints of serous fluid removed on each occasion. He was able to be up and about after each tapping, but he gradually became emaciated, weak, finally comatose, and he died July 20th. There were no hæmorrhages, and it may be stated that the abdominal veins were at no time more distended than is common in atrophic-cirrhosis. The condition *post mortem* was as follows: Fibrous adhesion in peritoneum; atrophic cirrhosis of liver, with thickened capsule; old, firm thrombus in vena portæ, extending into splenic and mesenteric veins; thickening and patchy calcification of the walls of the portal vessels; great enlargement and induration of the spleen; kidneys indurated; no special changes in thoracic organs. A careful dissection of the abdominal veins was not made, but I am told by Dr. Miall, who made the autopsy, that the peritoneum was very dark and the veins behind the liver very large. The collateral channels were, no doubt, largely the anastomoses which exist between the peritoneal, mesenteric and lumbar veins and the gastric, diaphragmatic and œsophageal vessels. As in the case of fibroid obliteration referred to, a perfect collateral circulation may be established in occlusion of the portal vein, and the patient may live for months or years. In this instance, the thrombus was evidently old, as in places there were calcareous changes. The branches in the liver were filled with

soft clots. The gall-bladder was full of normal bile. In two other cases of cirrhosis I have met with thrombi in the portal vein, in both instances with thickening and atheromatous changes in the vessel walls, but the thrombi had not undergone such degenerative changes as in this specimen.

Dr. H. F. Formad presented a specimen of *Chronic Hypertrophic Cirrhosis of the Stomach, with Gastric Ulcer, and Colloid Change of the Mucous Membrane.* A sailor, aged 38, a German, was admitted to the Naval Hospital ten months ago, with the symptoms of dyspepsia and occasional vomiting. There had been absolutely no pain at any time, and no vomiting of blood. Three months before death he began to have serious difficulty with swallowing, with œsophageal regurgitation, and though a stricture was sought for, none was found. Very curiously, for a few days immediately preceding death, he swallowed well. Death resulted from starvation. At the autopsy the abdominal cavity was found to contain 52 oz. of straw-colored fluid, and showed evidences of old peritoneal inflammations, especially at the upper part where the organs were matted together into one mass. The stomach was quite contracted, having a capacity of 4 to 5 oz. Its walls were one-half to one inch thick, the thickness greatest at the cardiac and gradually decreasing till within two inches of the pylorus, where the wall abruptly resumed its normal condition. The first impression given was that it was a case of cancer, but closer examination showed it to be simply great thickening of the wall with polypoid elevations of the mucous membrane and secondary colloid change. The ulcer was situated in the posterior wall, near the cardia; its bottom formed by scar tissue in the spleen and the peritoneal coat of the transverse colon. Communication with the abdominal cavity had been prevented by firm adhesions. The omentum contained a number of colloid granules as large as peas. The abdominal lymph glands appeared to be amyloid. The case was remarkable, first, in the complication of hypertrophy with gastric ulcer, a condition which the reporter had never before seen; second, in that the hypertrophy should commence at the cardia instead of at the pylorus.

Also a *Stab Wound of the Abdomen.* Laparotomy had been performed. A wound of the intestine found, which was sutured. The man died suddenly sixty hours after the operation. At the autopsy there was only a very slight amount of peritonitis found, and the wound in the intestine had firmly united. The abdominal condition not being suf-

ficient to account for death, the brain was examined, and a very distinct embolus in the floor of the fourth ventricle found. The stomach had not been touched, but on its peritoneal surface were some slight tears, and opposite them in the mucous membrane, but not corresponding exactly with them, were several distinct, small linear ulcers, which appeared like ulcers due to some injury. They did not look at all like ordinary ulcers, but still had evidently formed ante mortem. There was an old hæmorrhagic infarction of the kidney.

Dr. Osler had been particularly interested in the specimen, and had hoped that possibly it might prove to be related to the formation of gastric ulcer in the way pointed out by Dr. Baumgarten, and to which he wished to call attention, namely, that the movement of the stomach against the costal edges produces distinct localized thickenings, and that in corresponding points of the mucous membrane ulcers form.

Also a *Gunshot Wound of the Heart.* The ball had entered the chest between the fourth and fifth ribs on the left, passed through the left ventricle, and was found imbedded in the spinal column. Death was instantaneous. The principal point of interest lay in the fact that the ball had traversed the cavity of the left ventricle near its base, without injuring the chordæ tendineæ or the leaflets of the mitral valve.

Dr. Wescott presented a *Mediastinal Tumor*, removed from a man, aged 28, who had entered the University Hospital a week ago. He was a brakeman with good family history and personal habits, and no venereal history. He had been in good health and at his work till last July, when dyspnœa developed, and he quit work. About the same time he noticed a tumor in his neck. There was no pain nor difficulty of swallowing. On admission he was in a condition of orthopnœa. Over the left side of the chest there was complete dullness extending to the right edge of the sternum, with absence of respiratory murmur. The apex beat of the heart could not be seen or felt. The tumor of the neck involved the superficial lymph glands, and could be traced behind the sterno-cleido-mastoid muscle and down into the chest. There was no inequality of the pupils and no œdema. At the autopsy, on opening the chest, nothing but a large, fleshy mass and the edge of the right lung could be seen. The mass penetrated the chest wall between the first and second ribs, and became continuous with the tumor in the neck. It was closely attached to the bodies of the dorsal

vertebræ from the first to the fourth, filled all the upper part of the left chest, and completely enveloped the great vessels. The œsophagus was pushed to one side, but not compressed. The left lung was completely collapsed and contained numerous secondary nodules. The heart was pushed down and back, but was normal. The mesenteric glands were enlarged. A section of the tumor showed largely fibrous tissue. The reporter asked whether, in the case of such a large mass, the absence of pressure-symptoms was not remarkable.

Dr. J. B. Walker said that in the absence of pressure-symptoms, such a large tumor was, in his experience, unique, generally very much smaller ones giving rise to marked symptoms.

Analyses, Selections, etc.

[Prepared by WILLIAM S. GORDON, M. D., Richmond, Va.]

Three Larvæ (Dermatobia Species) Removed from Under the Skin—Remarks, etc.

Dr. Rudolph Matas, of New Orleans, reports the case (*N. O. Med. and Surg. Jour.*, Sept., 1887) of an Englishman, aged 38, arrived from Spanish Honduras about June 20th. While bathing, he was stung by a peculiar fly, well known in Honduras, because it attacks man and beast, and deposits its ova in the sting, wherein the "worms" develop and grow to ¾th inch in length. The patient exhibited three red, hard, furuncular swellings, one near right intergluteal furrow, and two other, though smaller, elevations on left side of same furrow, closely adjoining one another. The first was elevated about ¼th inch above surrounding skin, and had a circular area of inflammatory hardness, about 1¼th inch in diameter, with a minute orifice in its most elevated and central portion, which might admit a bristle. Each of the other swellings also had central orifices, where a little puriform crust had become fixed, indicating the original point of entrance to the larval sinus, which had an oblique direction. These were cut into, and the larvæ were found immediately under the derma proper. In Honduras, the patient said, the natives usually first apply hot tobacco-ashes to the parts, and follow this up by digital expression. In this case, Dr.

Matas cauterized the cavity left after extraction with pure carbolic acid, and there was no excessive inflammatory reaction. Such parasitic larvæ have not been uncommon in Charity Hospital in patients from Central American Republics.

Dr. Matas mounted the three specimens under the microscope in a glycerine cell. The larvæ (fig. 1) are smaller than they appeared in life, as they have slightly contracted. The long diameter of the largest measures 4 or 5 mm.; in breadth, about 1½ mm. They have an elongated pyriform or clavate appearance, the thick and rounded portion corresponding to the head and trunk, which were furthest from the surface of the skin; the tapering or caudal extremity pointed upwards, so that in squeezing the larva out, the tail end appeared first. As the caudal extremity presented, a dark red dot was visible at the extremity, corresponding to the anal extremity containing the stigmata for respiratory purposes, characteristic of, though not peculiar to, the *dermatobia* larvæ. This is the normal position of these parasites, for the respiratory apparatus, which is close to the anus, is placed near the opening originally made by the sting of the parent fly, in order that they may be close to the atmosphere. When the larvæ were extracted, they wriggled until embalmed in the cell five or six hours after extraction.

Fig. 1

FIG. 1.—Three larvæ as they appeared *to naked eye* immediately after removal from patient.

The most perfect specimen (low power ¾ obj. B. and L. eye-piece B.) shows the major portion to consist of an elongated, pyriform, tuberose, or exaggerated clavate body, apparently concave ventrally and convex dorsally, tapering in a long, glabrous, elongated-pyramidal extremity. The broad truncated part is opaque, and none of contained organs can be distinguished. (For external appearance, see fig. 2.) Corresponding to three dark zones, outlined with naked eye, are three *double* rows of black hooklets or spines, distinctly shaped, like thorns of a rose-stem. They are lamelliform, sharply pointed at the ends, and curved (the majority) towards the caudal extremity, so that, if embedded in the tissues lining the larval sinus, they would resist caudal traction in direct ratio to the force employed. This assists the larva in retaining its position in the subcutaneous tissues, and especially in preventing involuntary migrations from regions subjected to great muscular disturbance. They may also assist in burrowing, though advance or head movements

do not appear to be habitual with these larvæ, as they, in common with most ectodermic parasites, are not anærobic

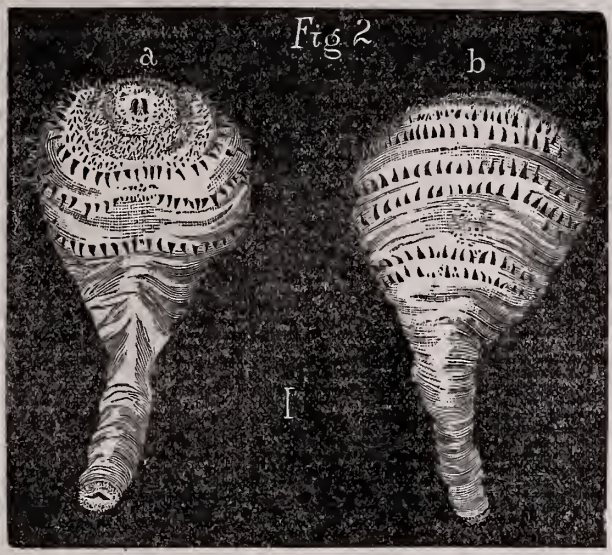

FIG. 2.—One of the larvæ viewed in its (*a*) *ventral* and (*b*) *dorsal* aspects. *a* shows ventral aspect and the appearance of cephalic and caudal extremities, also shoms that the three rows of spine are single below, while the dorsal view (*b*) indicates that they are double above. The point where the double rows end is also shown in the ventral view (*a*). Hair-line between figures indicates the amplification.

(to use a Pasteurian phrase), but require atmospheric oxygen for maintenance.

The disposition of the spines differ as to their arrangement, according to the aspect of the parasite examined. Thus (fig. 2) the three rows of spines are single on the ventral and double on the dorsal aspect, the point where the double row ceases being plain in *a*. This peculiarity is also exhibited in the species figure 4, indicating relationship between them. The only segments distinctly outlined are the first, which represent the cephalic end, containing the oral cavity, armed with two styles, figure 2 (*a*), and the second, which immediately follows it. The caudal extremity is also shown, though the stigmata are doubtless hidden within the anal fissure. In this respect they differ from Brauer's (fig. 4, *a*, *b*, *c*) and Coquerel's (fig. 4, *d*) specimens of similar larvæ, with which they appear to be otherwise closely related. A large number of small punctiform and blackish tuberosities are also seen dotted in a somewhat con-

centric manner above the upper row, on the two upper segments and the vicinity of the oral point.

It is quite plain that these parasites—"beef or screw worms of Honduras,"—are the larvæ of the species of gadfly (*œstrus*), which may be peculiar to Central America, but which I would regard as the offspring of œstridæ or gadflies, which entomologists have classed as dermatobia. The fact that the larvæ were young—less than 16 days old—and much smaller than the more mature "worm," may also explain slight differences in configuration.

Three species of œstridæ attack the subcutaneous tissue of man, with the view of depositing larvæ therein: 1st, *hypoderma bovis*, which in Europe preferably attacks cattle, and rarely man; 2d, *cuterebra* of Clark (entirely American) attacks beast and man; 3d, *dermatobia* of Brauer, believed to be especially attached to man, but erroneously so.

The *hypodermia bovis* is an œstrus which closely resembles the drone bee. Its proboscis has no distinct palpi; the third segment of the antennæ is transverse; its mouth is Y shaped; its third segment is covered with black pubescence; wings are wide apart, and brownish. The female has a longer abdomen than the male. The length of the perfect insect is about 11 to 13 mm. The larvæ grow under the skin of beef and other animals. This larva presents an oval, elongated outline. It is *attenuated in its anterior extremity, and thick or enlarged at its posterior end*, differing radically from the larvæ presented to-night. The horny hooklets which surround the oral orifice of most œstral larvæ are in this species replaced by five or six fleshy tubercles covered with spines. These tubercles surround a mouth barely visible, above which are two small tentacula. Its body is formed of eleven segments, and *flattened* dorsally; *convex* abdominally—differing in this respect from my specimens. Each segment is covered with flattened spines, presenting grooves in their inferior edge. The caudal extremity presents a sack, wherein are placed two stigmata, which look towards one another in the concave portion.

When the presence of the hypodermata is announced by buzzing, the most docile ox is rendered frantic, and becomes intractable. As soon as the ox feels himself attacked, he lowers his head, his tail quivers with fear, and is projected to a level with his spine, and he rushes to the nearest stream, where he plunges, with the hope of ridding himself of his dreadful enemies. And still the sting of this insect must be very insignificant and barely perceptible to such a large pachyderm as the ox. (Bocquillon.) This sting is purely

to enable the female fly to deposit her eggs. In fact, shortly after the ova have been deposited, a number of elevations—from 4 to 100 (Sells)—are seen and compared to the "œdematous bumps which result from a blow suddenly inflicted on the brow." On each swelling there is a central orifice, which becomes larger as the swelling progresses. Into this orifice the larva places its last segment, and through this opening the air necessary for respiration reaches it. The borders of the openings are usually encrusted with dessicated pus. When the larva has gorged itself with pus its presence has created, and when it approaches the time for its transformation into a chrysalis, it retreats backwards, its posterior extremity projects beyond the orifice; the body soon follows, and then drops on the ground, to complete its metamorphosis.

Another hypoderma attacks horses. It selects those parts of the animal which are least accessible to the tongue (differing in this respect from the ordinary bot flies), and there deposits its eggs. It inhabits the northern of France, Belgium, Holland, the shores of the Baltic, and is common in many parts of the United States, where the larvæ are more aptly known as "beef worms."

Cuterebræ.—This family of œstridæ was established by Bracey Clark, of London, in 1815, who gave them this name, because they especially deposited their ova, subsequently larvæ, under the skin. They were also designated *trypoderma* by Tiedeman. The cuterebræ are all natives of America, which appears to be their exclusive habitat. The true cuterebræ are large flies which spring from parasitic larvæ found under the skin of squirrels, rabbit, kangaroos, etc. Of the perfect insects, at least 17 species have been described. They measure from 15 to 20 mm., and present the appearance of the ordinary beef gadfly. They are brownish or black, with abdomen sometimes blackish-blue or rusty red; hairs (pubescence) blackish, silvery, yellow, etc. The larvæ *closely resemble those of the hypodermata; are fleshy, very annular and tuberculated, ovoidal, without hooks or spines, and especially obtuse and not attenuated* [*clavate*] *into a tapering extremity.* (Laboulbène.)

Many species of this family have been confounded with those of another, which has only been differentiated in recent times, and which is the one to which the larvæ that I here present are strictly related. These are the œstridæ of the dermatobia. This genus was established by Brauer, who included in it many of the species formerly claimed for the cuterebræ by Macquart, Joly, Gaudot, etc.

The leading taxonomic characters by which the perfect dermatobiæ differ from the cuterebræ are, according to Laboulbène: Third segment of the antennæ is longer than the other two together; is elongated, instead of being oviform, as with cuterebræ; head relatively much larger and projecting; abdomen flattened, triangular, instead of vaulted and cordiform.

These insects have been regarded as the exclusive parasites of man (*œstrus hominis*). Their larvæ were described long before the parent œstrus. It was not until almost recently that the perfect insects were discovered. Arture was the first to present a description of one of the species in his account of the ver-macaque, or macaco worm, of Cayenne.

The celebrated cuterebra (dermatobia) noxialis of Gaudot (fig. 3), is found in great numbers on the edge of great forests and in the prairies. This insect inspires great dread to wild cattle, which prefer to pass the day in sandy wastes than expose themselves in shady pastures to the multiple and maddening attacks of these enemies.

It is probable that the dermatobiæ deposit their eggs in a manner similar to the hypodermata, selecting the parts of the body that are least accessible to the mouth or the tail. The female dermatobia are extremely prolific, as on a single beef Gaudot counted several hundred larvæ. These larvæ cover a large surface of the back of the cattle, forming under their skin, and by their aggregation a large mass of tumors, from which pus is continually oozing from a multitude of orifices. These openings often accommodate other dipterous insects, which lay their eggs there also, develop into larvæ, and give rise to the foulest sores imaginable. The larvæ of the dermatobia are also found on the head, flanks, tail, and the spine; but it is generally on the shoulders that the chief focus of larval aggregation is found. A larva is metamorphosed into a perfect insect about two months later.

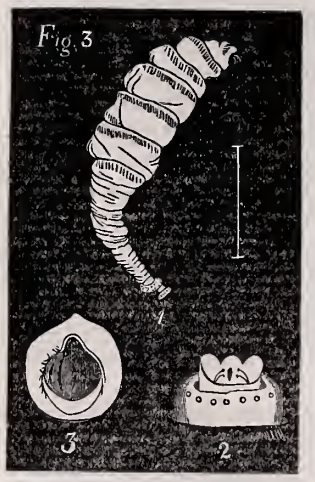

FIG. 3.—A typical dermatobia. "Ver-macaque." Dermatobia noxialis (Brauer).
1. Whole larva.
2. Cephalic portion.
3. Caudal extremity. (From Bocquillon.)

In addition to man, the cattle and dogs in South America are freely victimized by this fly.

In South America the people employ methods quite similar to

those followed in Europe to dislodge the hypoderma of cattle. After squeezing the tumor until the larvæ are thrown out, the larval cavity is washed out with salt water. Often, however, an animal that has been washed in the morning will be found at night covered with hundreds of larvæ, which can only be radically exterminated by filling up the holes with tobacco extract, or by dusting them with a dried and pulverized fruit of the *assagria officinalis*. It is advisable to leave the larvæ of the dermatobia grow for some days after they are deposited under the skin, so that the pressure exercised in the process of squeezing them out be more efficacious. This is what the natives of South America have learned to do in their plan of "feeding the worms."

Dr. Matas concludes:

First.—The three parasites removed from his patient are the larvæ of an œstrus of the order of the dermatobia (Brauer), which is a native of Honduras, Central America.

Second.—These specimens are in all likelihood representatives of a species allied to the dermatobia noxialis (cuterebra noxialis, Gaudot), though presenting marked differences between them.

Third.—In removing these parasites from the skin, the best method is that of expression (squeezing), combined with a small oblique incision into the orifice of the larval sinus, assisted by the toxic influence of tobacco locally, in the shape of extract, poultice, hot ashes, etc.

Since reading the above, Mr. L. O. Howard, of the Entomological Division U. S. Department of Agriculture, at Washington, in confirming my conclusion that these specimens are members of a species of dermatobia, emphasizes the opinion that they are not identical with the dermatobia noxialis, with which they have been confounded, but are members of an *undetermined* species, which had been already recognized by Brauer. He says the larva is unquestionably that described by Say (*Jour. Acad. Nat Sci.*, Phila., II, 334, and in his complete writings, Vol. II, page 32), which he calls *œstrus hominis*, reviving the name of Gmelin. LeConte says the species is determined as *cuterebra noxialis* (Gaudot). On referring to Brauer, however, this identical larva is figured (see fig. 4, a, b, c), and mentioned as an *undetermined* species of *dermatobia*. Gaudot's *noxialis* is placed by Brauer in dermatobia, and not in *cuterebra*, and the larva is figured from specimens received from Cayenne. The other species, however, which Say describes was received by Brauer from Osten-Sacken, from North America, where it is said to have

lived in the head of a man. Brauer also states that it is identical with the larva described by Coquerel from the head of a mule, from Cayenne (see fig. 4, d). Coquerel, however, simply states that it was collected by Dr. Chapuis from a tumor upon a mule, at Cayenne, and no reference is made to the fact that it was found upon *the head* of this mule. The larva is then that of an *undetermined* species of *dermatobia.* It is probably found in domestic animals all through Central America and northern South America, and

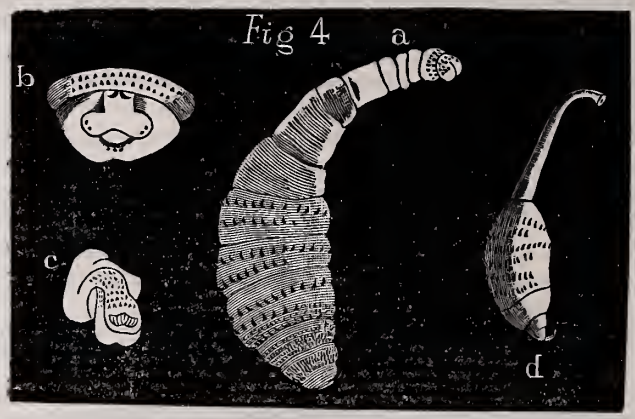

FIG. 4.—*a*, Brauer's figure of entire dermatobia larva supposed to be closely allied to specimens shown in figures 1 and 2, *b*, cephalic extremity; *c*, caudal extremity of same specimen.

d. Dermatobia (larva) figured by Coquerel and closely related to, if not identical with, preceding, only seen under a lower power, and perhaps in an earlier period of development. [From figures kindly furnished by U. S. Dept. of Agriculture, Entomological Div.]

may be a species already described, but not connected with its larvæ. Dr. Matas appends Say's description, with Prof. LeConte's annotations, which accurately describe the larvæ.

Natural History of Plagues.

Dr. Robert B. S. Hargis, of Pensacola, Fla. (*Southwest Med. Gazette*, Sept., 1887), refers to the general healthiness of his State, and speaks of the different epidemics which have affected the human race. The causes of these plagues are traced, their mitigation by scientific discovery discussed, and the belief expressed that science is destined to make conquests which will redound to the glory and honor of the profession.

Diatheses and Cachexiæ.

Dr. John B. Elliott, of New Orleans, La., very well says (*N. O. Med. and Surg. Jour.*, Sept., 1887) that the same drugs do not always act according to the powers assigned them by experiment. This brings us to the conviction that all patients are not alike in their constitutional make up—that there is a striking variety as regards susceptibility and response to medicinal treatment. Diatheses and cachexiæ are important elements. He then defines *diathesis* as a condition or constitution of the body which *can* be induced and transmitted hereditarily; is very permanent, and can be obliterated only through long continued treatment. *Cachexia* is a bad habit of the body which can be induced, but is not usually transmissible hereditarily. It is a transient condition compared with diathesis, and is removable by proper treatment. Thus we have strumous, gouty, bilious or tropic, and syphilitic *diatheses;* and malarial, scorbutic, plumbic, mercurial *cachexiæ*. He prefers to place the *rheumatic* diathesis as a variety of the gouty, while the *cancerous* diathesis has never seemed to him to afford such evidence of its presence as to be recognized independently of the appearance of the disease. *Constitutional types* of diseases can never be induced, but are always inherited; such are the nervous and lymphatic constitutions. The essential difference between these constitutional types and a true diasthesis is that the latter *can* be; the former *never* can be induced. The diathesis *may* be, but the constitution *must* be inherited. Diathesis can be, but the constitutional types cannot be removed. One or the other type of constitution lies behind every diathesis and cachexia.

But we cannot always easily diagnose these conditions. Inheritance is usually brought out by a careful history of the case; but it gives only presumptive evidence of a diathesis. Modes of life may develop all except one of the diatheses. Thus ill ventilated, damp offices, etc., may develop tuberculous diseases; sedentary habits, with high living, may develop gout; poverty and starvation may develop scorbutic diseases, etc. These various constitutional states bear differing relations to the effects of drugs. Thus the strumous diathesis responds badly to mercurials and to alkalies. Both of these groups notably diminish those very processes of combustion which are at fault in this diathesis. This diathesis responds kindly to opium and its derivatives. In the gouty diathesis, on the other hand, mercurials and alkalies act favorably as a rule, although the salts of lead are decidedly harmful.

Endocarditis and Pyæmic Symptoms.

Dr. A. Pettit, of New Orleans, reports (*N. O. Med. and Surg. Jour.*, Sept., 1887) two cases. *Case I.*—Railroad clerk, aged 30. For several years had probably not gone to bed perfectly sober. Mild rheumatism developed, but no marked perspirations, nor did his symptoms point specially to his alcoholic habits. Ordered quinine and sodium salicylate, but fever continued 12 or 14 days, with frequent and feeble pulse. For 10 succeeding days he had severe rigors—sometimes twice in 24 hours—followed by high fever and profuse sweats. He also had præcordial pain; systolic murmur. Then he had pain and soreness of right leg, which was œdematous. During this time he would sometimes talk incoherently. Digestion good; hypnotics seldom required. Began to improve about 28th day, and was discharged convalescent on 42d day. His treatment consisted in tonics, stimulants, nourishment and recumbent position—even during defecation. There were no abscesses. Diagnosis was probably ulcerative endocarditis.

Case II.—Colored woman, aged 20. First childbirth about a month previous, and normal. A day or so before the Doctor was called she had chill and fever and remained in bed a few days, when she resumed household work. She then had another chill and fever, and the general appearance of bad health. Diagnosis, malarial fever; ordered quinine in large doses. But the chill and fever recurred several times, and then became continued remittent. Mineral acids were given, but still temperature kept up, and pulse was frequent and feeble. About 18th day, gave antipyrine. Better next day, but on next day she had a frightful rigor, followed by 105° temperature and profuse sweat. At irregular intervals during next ten days there were like exacerbations. Tongue became dry. Gave milk and beef tea. Slight pain in chest. No focus of suppuration was found. Some days later the Doctor was called in great haste. Embolism at bifurcation of aorta had occurred. Severe pain in lower extremities, of a burning character; also deafness and tingling. Demanded vociferously to be helped out of bed. Systolic murmur over whole area. Unable to draw up her legs. No pulse in femorals nor iliacs, nor anywhere below bifurcation of the abdominal aorta. Feet and legs already cold, and gangrenous spots appeared on them in a few days, and most of the toes became as hard as stone. Death in ten days. Diagnosis, probably ulcerative endocarditis.

Case of Malignant Pustule—(Charbon)—Death.

Dr. Henry O. Read, of Grande Chenière. La., reports the case (*N. O. Med and Surg Jour.*, Sept., 1887). Farmer, aged 48, contracted charbon, on outer side of left carpal bones, as a small vesicle, with hard circumscribed base. On 4th day applied actual cautery, but swelling increased rapidly, and hand and forearm became enormously swollen. Original pustule developed into a gangrenous slough, with hard, elevated edges; hand cold and without circulation; axillary glands as large as hazle nut, but not painful; violent pain in hand; not much constitutional disturbance; temperature 102°; pulse 90; breathing normal; appetite good. Prescribed carbonate of ammonia, brandy, quinine, tincture of iron alternately every four hours. But the swelling spread rapidly up the arm into the body, and he died on 6th day. Conscious to the last. No lesion of any organ except heart. This is the first death from this disease out of many cases the Doctor has had in thirty years of practice. The disease is never contracted in the human being except by inoculation. Period of incubation is generally 6 to 24 hours. Constitutional disturbance appears on the fourth day, and is seldom greater than would be caused by the maturation of a vaccine pustule.

Case of Strangulated Inguinal Hernia Complicated with Intestinal Obstruction.—Herniotomy—Laparotomy—Recovery.

Dr. A. B. Miles, of New Orleans, reports this interesting case (*N. O. Med. and Surg. Jour.*, Sept., 1887). Male, aged 36. A base-ball injury three years ago was cause of present trouble. He probably had peritonitis and adhesive bands. The hernia was decided two years ago, due to lifting a child. This hernia he often reduced himself. July 19th, 1887, he awoke with "cramps in the abdomen." The hernia was then noticed to be irreducible, and soon became strangulated. Herniotomy was at once performed, relieving the inguinal constriction without opening the sac, but could not reduce hernial contents. Sac was then incised and exposed protruding omentum and small bowel; but reduction was still impossible because of an obstruction within the abdomen. The incision was at once prolonged along the semilunar line and the abdomen opened. The small bowel was found caught between bands of peritoneal adhesions which were easily severed. Wound was sutured and dressed antiseptically. Creosote and deodorized tincture of opium relieved nausea and vomiting. Temperature only once rose to 102°.

Suppuration gradually decreased, and the patient was discharged from hospital August 17th convalescent.

Vesico-Vaginal and Recto-Vaginal Fistulæ Cured without Operation.

These cases occurred under the care of Dr. P. Michinard (*N. O. Med. and Surg. Jour.*, Sept., 1887). *Case I.*—Negress, aged 42; large child after tedious 48 hours natural labor. Fistula large enough to pass No. 18 urethral sound was found half inch in front of cervix uteri communicating with the bladder. Used daily vaginal douches of hot water for one week. Then thoroughly cauterized edges of fistula with solid silver nitrate, and repeated every four days for four times. Recovered in about three weeks. *Case II.*—Negress, aged 21. Vesico-vaginal fistula about an inch in front of cervix. Same treatment, and like result. In neither case was patient confined to bed, nor was a catheter retained. *Case III.*—Recto-vaginal fistula, large enough to admit No. 17 sound, about an inch above anus. About an inch above this, stricture of rectum which prevented passage of No. 3 rectal bougie. Gradual dilatation up to No. 7 rectal bougie cured the fistula also in three weeks—without other application or medicines except laxatives and tonics.

Nux Vomica for Opium Poisoning.

Dr. W. Stadler says (*N. O. Med. and Surg. Jour.*, Sept., 1887) Dr. Davidson, of Sharon, Ga., successfully treated a case of opium poisoning by a single hypodermic injection of extract of nux vomica. This recalls to memory the case of a would-be suicide who took two grains of morphia and one grain of strychnia, and recovered. After this Mrs. ———, aged 64, was accidentally poisoned by morphia—gr. ¼th. She was insensible; respirations 4 per minute. Two hypodermics of one-tenth grain each of strychnia brought her back to life. Coffee was then given, and tenth-grain doses of strychnia, so that in three hours she had taken one grain of strychnia. If he had the case to go over he would give large dose—half grain—of strychnia at first, and then lessen the subsequent doses—*if required.*

Man an Object of Zoology.

Dr. S. W. Stiles, of Georgia, continues (*South. Med, Rec.*, Sept., 1887) an article of scientific interest upon this subject. The paper relates chiefly to the comparative anatomy of man and the orang-outang.

Pyæmia and Septicæmia.

Dr. J. M. Alexander, of Flat Creek, Tenn. (*South. Prac.*, Sept., 1887), discussed this question before the Bedford County Medical Society. The composition of the blood, its changes in pyæmia, and the general symptoms of the disease are quite fully treated. Reasons are urged for the belief that the liquor puris is the toxic principle, that pyæmia is purulent infection of the blood, and that it is something more than embolism. Septicæmia is septic infection of the blood from causes other than traumatic, and the symptoms differ from those of pyæmia. In both affections our resources are limited. Free ventilation is of prime importance; cleanliness next, and then the best antiseptics. The salts of quinia stand first in the drugs, and free stimulation is often required.

Compound Comminuted Fracture of Cranium.—Recovery.

Dr. J. G. Bohannon, of Greenville, Ky., reports (*Southwest Med. Gazette*) the case of a negro man, who was thrown by a railroad car against a rock projecting from the side of a cut. Patient received a compound comminuted fracture of the cranial vault, with laceration of membranes and brain, with some loss of brain, and lay for ten hours in ditch under a cold rain, the temperature being just above the freezing point. The symptoms were grave, but reaction occurred under appropriate measures four hours after the patient was seen. The bone splinters and general debris were removed, a somewhat free hæmorrhage succeeding. Warm and weakly carbolized water was freely used in the cavity, which was closed by approximating the scalp edges with adhesive plaster, a small opening being left for drainage. On the seventh day, after progressing favorably, pneumonia set in, a large portion of the upper lobe of the right lung being affected. In five days this yielded to treatment. On the twenty-sixth day the wound was healed. Paralysis in arm disappeared ten days after the injury, but lasted fifty days in lower extremity. Sexual appetite and power were abolished for two months. The good results are attributed to a strong constitution, thorough cleaning of wound, cleanliness and antisepsis, and rest in the recumbent position throughout.

Strangulated Hernia—Intestine Opened—Operation.

Dr. W. W. Pugh, of Augusta, Texas (*South. Prac.*, Sept., 1887), reports a case, in which the intestine was opened, and ounces of blood-clots and sanguineous fluid were pressed

out. Rigid antisepsis was used. The internal femoral fibrinous bands were divided, the intestine sewed up, and the wound closed. Patient made a good recovery under careful treatment. The belief is expressed that, contrary to the directions of the text-books, it is best to open the bowel and drain off any septic matter, when the bowel is black and threatening gangrene.

Tobacco Amblyopia—Strychnia.

Dr. J. Morrison Ray, of Louisville, Ky. (*Southwest Med. Gazette*, Sept., 1887), reports three cases to show the effect of the excessive use of tobacco upon the eye. The conclusions reached are that loss of sight in some subjects can occur without gross changes in the fundus. These cases will often improve after discontinuing the weed, but more rapidly under the use of strychnia. The hypodermic use of the drug is efficient not only in the tobacco cases, but also in atrophy of nerve. The full dose administered can often exceed the dose recommended. The writer has seen one-half a grain of strychnia given before its physiological effects were produced, and believes that sufficient stress has not been laid upon the value of the drug in the affections mentioned.

Blisters in Peritonitis.

Dr. C. H. Wilkinson, of Galveston, Texas (*Tex. Cour.-Rec. Med.*, Sept., 1887), gives some cases illustrating the good results obtained from blisters in peritonitis. He does not claim originality for the treatment, but desires to call attention to the efficacy of an old measure, and one which, in his opinion, has been too much disregarded.

Chian Turpentine in Cancer.

Dr. E. J. Ward, A. M., of Waxahachie, Tex (*Tex. Cour.-Rec. Med.*, Sept., 1887), discusses this subject, referring to several cases of epithelioma treated with the drug. His conclusion is expressed as follows: "We must be content to wait until our knowledge of histological pathology is more complete than it is at present, for a satisfactory solution of such problems as these; but certainly the presumption is strongly in favor of the view that these cases of spontaneous cure, and those recovering under the use of Chian turpentine and other so-called cancer remedies are benign growths, simulating in their symptomatology the characteristics of cancer."

Bergeon's Method with Phthisis.

A case of laryngeal phthisis is reported by Dr. J. W. Carhart, of Lampasas, Texas (*Cour. Rec. Med.*, Sept., 1887). The apparatus was improvised by himself. Before using it, the patient had improved under local and constitutional treatment. During the administration of the gas all other measures were discontinued except an occasional spraying with cocaine in the larynx. The coughing spells diminished in number, and the character of the expectoration changed. Patient became stronger, the skin improved in appearance, and the night sweats ceased.

Chronic Constipation.

An article read before the Mississippi Valley Medical Association, by Dr. George J. Cook, of Indianapolis (*Southwest Med. Gazette*, Sept., 1887). The writer recognizes two forms of the complaint—the obstructive and atonic. Causes of first form are irritation of sphincter, contraction of the upper rectum, organic stricture, large hæmorrhoidal tumors, and uterine displacement in the female. The most frequent cause of the atonic form is irregularity of habit. Stress is laid on the connection between constipation and diseases of the female generative organs. In the treatment, it is important not to carry the use of cathartics to excess. Salines, when indicated, are efficient in small doses before breakfast. Each case must be treated on its own merits.

Dynamite.

The heading of an article by Dr. E. van Goidtsnoven, of Atlanta, Ga. (*South. Med. Rec.*, Sept., 1887), in which, after giving a number of illustrative cases, the writer reaches the following conclusions: 1. That nitro-glycerine is a potent remedy in functional diseases of the heart from disordered enervation, with mitral failure, decreased or diminished circulatory action, sinking sensation, sense of impending danger, cerebral anæmia, collapse, and syncope. 2. That, in many grave cases, digitalis, though very efficient, should yield to nitro-glycerine. 3. That there are cases in which the drug may prove a good substitute for alcohol.

Some Peculiar Cases.

In the *South-Western Medical Gazette*, Sep., 1887, Dr. M. E. Poynter, of Midway, Ky., gives two novel cases. In the first, a negro man, aged 29, was struck half way between the point of the shoulder and the neck with a piece of wood,

four feet long, one and a half inches in width, and five-eighths of an inch thick. No appreciable effect was produced; but after walking a short distance, he lay down and expired. Autopsy revealed *rupture of right auricle.* Heat, previous excitement, and unusual exertion, had acted on the already thin cardiac walls, and the blow with the stick was probably the last of the exciting causes. A jury exonerated the striker from blame. In the second case, an infant, on the day after its birth, was reported to be passing fæces *per urethram.* Examination revealed the truth of the statement, and the anus was found imperforate. There being no necessity for immediate measures, the Doctor left, promising to operate the next day; but was detained forty-eight hours with a patient who could not be left. In the meantime the infant died, and an operation, which promised to be interesting, was frustrated.

Conservative Surgery.

The first paper of a continued article by Dr. J. M. Taylor, of Corinth, Miss. (*Miss. V. Med. Month.*, Sep., 1887). The writer enters with care into the history of surgery in the past, and is at some pains in giving statistics to prove his point. He claims that the first duty of the surgeon is to carry out the true principles and aims of his profession. The life of the patient must be first considered, and not the operative skill or the renown of the surgeon. The soundest and most philosophical practice will often be found in conservatism, while time and trouble are not to be taken into consideration when human life is at stake.

Ipecacuanha in Disease.

Dr. A. S. Holmes, of Benton, Miss. (*Miss. V. Med. Month.*, Sep., 1887), emphasizes the value of this drug in various diseases. The writer states that he has seen two thousand cases of malarial fever successfully treated with ipecac, and without quinine. In malarial hæmorrhages it is useful. The writer prescribes it in ten-grain doses, regardless of emesis. After the nausea, a pill of three grains of powdered ipecac is given every three hours. An obstinate case of epistaxis yielded to the drug, given by mouth and rectum, when other remedies had failed. An ice-bag was placed on the epigastrium in this instance, but ipecac alone relieved a recurrence of the trouble, the hæmorrhage ceasing as soon as emesis was produced. In minor hæmorrhages, the drug has been the best remedy used. In non-emetic doses it is

considered the most reliable agent in persistent hiccough. In an epidemic of acute dysentery, in Louisville, two hundred cases were treated with ipecac by the writer, who states that every case was cured when the *acute* form of the disease was distinguished from the *chronic*. As an alterative stomachic tonic, promoting peristalsis, and glandular secretion, it holds a high rank; and when it was used alone in chronic diarrhœa, in doses of one fourth to one grain, with meals, good results followed. The writer would not be surprised to see the drug proclaimed valuable in cholera.

Alcoholic Liquors in Practice of Medicine.

Conclusion of an article by Dr. Eugene Foster, of Augusta, Ga. (*Atlanta Med. and Surg. Jour.*, Sep., 1887). In this paper the writer discusses the bearings of the Local Option laws upon the medical profession. He concludes as follows: "I protest against the attempt of temperance fanatics to force the physicians of Georgia into support of the 'local option law,' by charging that those of us who cannot—will not—support it are the friends and advocates of the barroom liquor traffic. * * You, I, every physician known to me in Georgia, warmly sympathize with, and will join them in every effort to obtain reasonable legislation tending to decrease needless temptations to drink alcoholic liquors as a beverage in common use among our people. * * We should demand of temperance advocates to give us a law founded upon wisdom, justice and moderation, and we will accept and support it. But so long as the 'local option law' —so unjust to the medical profession, so inhumanly inconsiderate with the sick, who place their health and lives in our professional charge—is continued in its present policy, we should meet the emergency like men; we should fight it at every opportunity, and demand its modification or rejection by the people; we should indignantly, disdainfully defy every effort at terrorism."

Laceration of the Perinæum.

Dr. J. M. Sanders, of Magnolia, S. C. (*Atlanta Med. and Surg. Jour*, Sep., 1887), thinks that the main cause of failure to prevent laceration is due to the postponement of the measures employed. In primiparæ over thirty, it is often impossible to ward off rupture by the usual means. The perinæum should not be left to its fate when we know its peril, and the wish is expressed that an instrument to increase perineal capacity could be devised.

Cæsarean Section in the Cow.

Dr. Thomas M. Butler, of Funny Louis, La., describes (*Miss. V. Med. Month.*, Sep., 1887), a Cæsarean section performed by himself on a cow. Incision was made on the animal's side, in front of iliac crest, extending nine inches towards the mammary gland. The presentation was a breech dorso-anterior. The dead calf was very large, and the uterus had to be incised eight inches. Antisepsis was used, and the animal recovered. The writer argues that it is criminal not to perform the operation in the human subject, after the forceps are found insufficient for delivery.

Collinsonia Canadensis.

Dr. John V. Shoemaker, of Philadelphia, read a paper on this drug before the International Medical Congress, 1887 (*Progress*, Sep , 1887). Its common name is *stone* or *knob root*, and is found in the wood soils of all United States sections from April to October; has a rank, aromatic odor, and a hot, pungent taste. Virtue depends upon a volatile oil, driven off by boiling or drying. All parts of the plant are useful, but the root, which is the most powerful, is usually employed. Given as powder, tincture, fluid extract, or infusion. Dose of powdered root, from 10 to 60 grains; of tincture, from 20 drops to 2 drachms; of fluid extract, from 15 minims to 1 fl. drachm; of infusion, from 1 to 4 ounces. In healthy persons, small doses produce warmth in the stomach and bowels; large doses, diaphoresis and nausea—sometimes repeated but painless vomiting. Drug is especially valuable as a sedative and anti spasmodic. Is astringent and tonic. Has been popularly used with effect in various sections for the expulsion of *small* urinary concretions. With aconite and morphia, it affords the quickest relief in *acute*, and ought to be useful in *chronic cystitis*. *Incontinence of urine in children* is permanently relieved, when due to spasm of bladder, by one drachm of the tincture at bed-time for several nights. *Dribbling from bladder* after micturition in nervous cases is cured by 20-drop doses of fluid extract four times a day. In chronic diarrhœa, leucorrhœa, and prostatorrhœa, the drug is valuable. Constipation, hæmorrhoids, rectal neuralgia, and vague pelvic or abdominal pains—all due sometimes to spasm of sphincter ani—will in many cases yield to suppositories containing from 40 to 90 grains of powdered root. In vaginismus, flatulent, infantile, and biliary colic, and in colic without fever, the drug is indicated. Two cases of gastralgia were cured, and five cases of dysmenorrhœa

benefitted. Ordinary colds, mild lumbago, and spasmodic croups, can be broken up by a cupful of the hot infusion at bed-time. Collinsonia is effective in relaxed uvula from chronic pharyngitis; in hoarseness from lack of tone in vocal chords; in gastro-intestinal catarrh of inebriates; in chorea it is perhaps superior to cimicifuga; is palliative in pertussis; and is a good general stomachic tonic. Externally it is good for contused and incised wounds. One drachm of powdered root to one ounce of lard stimulates indolent ulcers. Ascarides are destroyed by enemata of fluid extract diluted with 4 parts of water. Several illustrative cases are given to prove the action of the drug.

Acute Dysentery.

Dr. M. F. Cooper, of Drummond, Tenn. (*Miss. V. Med. Month.*, Sep., 1887), states that an endemic visitation of this disease last year yielded best to the abortive treatment. A favorite mixture was—

℞. Sodæ et potass. tartrat.....ʒj
Tinct. opii camph.
Aquæ camphor.....aa ʒj
Aquæ puræ.....ad..... ℥vj
M. S.—Teaspoonful after each action until changed in character.

The writer treated last year nearly one hundred cases, and all of the acute types yielded to this treatment. If the system was run down, the results were not so good, and quinine was given with favorable results. When the dark, serous stools appear, whether free from blood or not, the bowels are locked up with the following:

℞. Pulv. opii.....gr. xx
Pulv. camphor.....gr. xx
Plumbi acetat.....gr. iv
M. Divide into ten or twenty pills.
S. One to be given every four or six hours *pro re nata.*

Quinine is essential in malarial regions. Opium is considered the best drug for pain and vermicular action. The writer believes that dysentery enters the second stage from twenty-four to forty-eight hours after the beginning of the attack.

Stones in Bladder Difficult of Detection.

Dr. J. McF. Gaston, of Atlanta, Ga., reports (*Progress*, Sep., 1887) the case of a gentleman who, in the spring of 1886, presented himself with symptoms of vesical stone.

Sounding revealed only prostatic enlargement, and patient returned to his family physician. At subsequent examinations, proofs of stone were sometimes obtained, but at other times were wanting. Diagnosis was encysted stone, and supra-pubic operation was contemplated as most feasible, but it was deemed best to await developments. The last exploration revealed a stone between the pubic bone and prostate. It was discovered by the finger in the rectum, and the tip of a sound having the form of Thompson's searcher. Patient sought advice from Dr. K. C. Divine, who finally agreed with the regular attendant, Dr. W. V. Reynolds and others, that stone was present. Dr. Divine favored the lateral operation, on account of the advantage in draining. In the meantime, patient consulted Dr. J. H. Brinton, of Philadelphia, Pa., who discovered, with a large staff, an apparently encysted stone at the base of the bladder. Dr. B. performed the lateral operation, which was prompt, and attended with little bleeding. Extraction of stone was made with difficulty. Patient reacted well, but died on the third day from exhaustion. At the time of operation he was weak, and said that he had suffered with the stone for 22 years. No post-mortem. Two stones of good size, and three the size of a pea—total weight, 480 grains—were extracted. Uric acid nuclei, with phosphatic covering. The most noteworthy feature of the case was that no method of exploration was entirely satisfactory in discovering the stone when five were present. The only solution is that they were concealed by the pockets of a contracted bladder.

Instruments to Assist Hearing.

Dr. Lawrence Turnbull, of Philadelphia, read a paper before the International Medical Congress (*Progress*, Sep., 1887) on this subject. The first natural means was the hand; then shells, into one form of which Itard introduced goldbeaters' skin—an idea recently applied by Mr. Maloney, of Washington, D. C. Metals are usually employed; and of these tin is the best. The deafer the person, the longer the tube must be. The causes of deafness must be first removed, as far as possible, and judgment used in the selection of instruments. Several illustrative cases are given. In a form of massage of the muscles of the ear; in the sclerotic form of chronic catarrh, with loss of elasticity of membrane; in anchylosis of the ossiculæ—especially of the foot-piece of the stapes—in exostosis or hyperostosis of same; rigidity of malleus, incal, and stapedial joints, these instruments are

useful. They should be used carefully every day from five to fifteen minutes, preceded by Siegel's speculum. In profound deafness, the double tube is the best. The *Currier double-ear tube* is of great value in cases supposed to be entirely deaf. This must be combined with systematic education of the ear by articulated sounds.

Retro-Pharyngeal Abscess.

Two cases are reported by Dr. J. M. Crawford, of Atlanta, Ga. (*Atlanta Med. and Surg. Jour.*, Sep., 1887). The first case —a farmer, aged 50—had suffered with rheumatism for several months, and with pain in throat for three weeks before seeking advice for the latter trouble. Had been treated without benefit. He presented typhoid symptoms, was emaciated, had severe pain in throat, spoke in a whisper, and walked with difficulty. Examination revealed almost entire closure of throat. Posterior portion of pharynx bulged forward. Abscess was punctured with a bistoury in upper portion, a free opening made, and the cut carried downwards into the abscess to prevent the flow of pus into the larynx. Pus flowed freely from the mouth when the head was lowered. Patient took twenty drops of muriated tincture of iron, and a toddy, thrice daily. In a week the cut had closed, and the pus re-accumulated. Pus followed another incision, which drained for several weeks. Iron was continued, and recovery followed. The second case—male, aged 20—had had syphilis for several months. The throat did not have a syphilitic look. Pharynx much swollen, and bulging forward, with great pain, insomnia, and inability to swallow solid food. Exploring needle brought away pus, and free incision, with anti-syphilitic treatment, perfected a cure.

Phlyctenular Ophthalmia.

A paper on this subject read by Dr. Dudley S. Reynolds, of Louisville, Ky., before the American Medical Association June 9, 1887 (*Progress*, Sep., 1887). In infantile cases, when a few of the epithelial cells on the cornea are invaded, become swollen, opaque, and broken down, and leave a minute circular abrasion, the conjunctiva is usually slightly suffused, and the eye is morbidly sensitive to light, with excessive lachrymation. In rare cases pain is present. In this parasitic form a single drop of the solution of atropia—one-eighth grain to an ounce of distilled water—is often sufficient for a cure. In small wounds upon the corneal epithelium, due to

foreign bodies, obstinate points of suppuration must not be treated with strong stimulating collyria. Touch the bottom of each cavity with a smooth silver probe, dipped in carbolic acid, and follow with a drop or two of a solution of atropia with morphia. Use actual cautery for indolent or perforating ulcers. In malarial regions, intermittent fever is sometimes attended with a form of phlyctenular keratitis, with iritis, diffused corneal inflammation, flecks or sphacelus at the point of origin, and iritic adhesions. Differential diagnosis is often difficult. Calomel and quinine produce excellent results. The latter is best given at night, followed by food, and rest in bed for ten hours, to avoid unpleasant effects. In superabundance of lymph, hydrargyrum bichloridum and the iodides may be necessary. Pilocarpine muriate (gr j to ʒss distilled water) aids in clearing the cornea in chronic cases. In a typical form of the disease, occurring in the limbus of conjunctiva, or near it in the cornea, we have minute elevations of a yellowish-brown tint, surrounded by a small leash of dilated blood-vessels. There may be one or more papules. Let alone, they degenerate centrally; and as the cells push into the center, an excavation at the apex of the cone appears. It is due to rupture of lymph tubes. This form occurs in the strumous subject, whose bodily habit may be acquired as well as inherited. Just here the subject of food is important, and mal-nutrition, resulting from the abuse of saccharine food, is an important factor in the causation of disease. Treatment must be largely hygienic, and diatheses and cachectic states must, if possible, be overcome.

Rapid Dilatation of Cervix Uteri.

Progress, Sep., 1887, contains an article read by Dr. Wm. H. Wathen, of Louisville, before the Ninth International Medical Congress. The dangers of sponge tents are pointed out, and preference is given to the bivalve metallic dilators. The tupelo tent is superior to others. It is claimed that the two-bladed dilators are relatively aseptic, easily used, complete the operation at one sitting, and are comparatively devoid of danger. This has been the experience of the best workers. Incision of the cervix has been more unsatisfactory than the use of tents. The doctor has no misgivings about performing the operation in his office without local or general anæsthesia. The patients seldom suffer much pain, are free from it in a short while, and do not have serious complications. Operation contra-indicated if there be in-

flammation of the uterus, or of the pelvic cellular or peritoneal tissue; or if much tubal or ovarian trouble be present. The vagina must be cleansed and the instrument disinfected in pure carbolic acid. In dilatation, from three-quarters of an inch to one inch and a quarter, chloroform is given, but not to full anæsthesia. Patient is prepared for the operation, which should be done about ten days after the menstrual period. A hypodermic of morphine and atropine is given just before chloroform. The woman is put on her back, and a speculum used—preferably a large bivalve, but Sims' may be used. Cervix is held firmly with a tenaculum, and the smallest instrument used first. The Doctor showed an improved instrument which he devised, and for which he claimed several advantages. The woman is kept in bed for a week, and the vagina washed with hot water daily. Sexual intercourse is proscribed for a month. The operation is stated to cure dysmenorrhœa in most cases, and often sterility.

Must the Ovaries Go?

Dr. Y. H. Bond, of St. Louis, Mo. (*Progress*, Sep., 1887), discussed this question before the Mississippi Valley Medical Association. He treats at some length of the pathological indications for Battey's operation, and sanctions it in many cases, although stating that it has been doubtless abused. Cases are given to illustrate the advisability of operating for the correction *in situ* of abnormal conditions, and the hope is expressed that in this field much good remains to be accomplished.

Case of Vesico-Cervico-Vaginal Fistula Requiring 70 Days' Preparatory Dilatation—Successful Operation.

Dr. Edmond Souchon, New Orleans, La., reports the case (*N. O. Med. and Surg. Jour.*, Sep., 1887). Mrs. M., married at 18, and immediately became pregnant. Vesico-vaginal fistula was the result of labor. Several months later the whole vagina was constricted—especially near os uteri, about diameter of a nickel. Dilatation was begun with Tiemann's rectal dilator, after making several incisions through cicatricial bands when put on the stretch. At end of 15 days, the deep parts were brought into view. A fistulous opening about size of a nickel was found, and the anterior lip of the os was gone, so that the margins of the fistula encroached on the cervical canal, which had a diameter of not more than a quarter inch. At first he could use only the ordinary

uterine dilator, with which he stretched the os, and left it *in situ* about 30 minutes. He then resorted to Tiemann's rectal dilator, and did as before. It required 70 days to dilate sufficiently to allow a thorough paring, and the passing of the long vesico-vaginal needle (with eye near point) through the posterior lip of the fistula, and there hook the thread and then withdraw the needle. The dilated os, after removing the instrument, was about (not quite) the size of a silver dollar. Sutures were removed at end of the tenth day. The union was complete.

Sympathetic Ophthalmia.

Dr. J. G. Sinclair (*South. Pract.*, Sep., 1887), in an article read before the Tennessee State Medical Society, discusses this subject. The disease is a dangerous inflammation of one eye, resulting usually from wounds of the ciliary region in the other eye. It comes on from three to six weeks after the injury to the fellow eye. In one case, enucleation having been performed, ossification of a part of the iris and ciliary body had taken place. Great responsibility rests upon the oculist, and several cases are given to prove that enucleation may not be necessary.

Quinine Idiosyncrasy.

Dr. C. L. Logan, of Yellow Bluff, Ala. (*Miss. V. Med. Month.*, Sep., 1887), states that when the skin and kidneys are acting well, the skin eruption and nervous symptoms, which sometimes follow quinine, are not so marked. He gives Dover's powder beforehand—or some other diaphoretic—with a diuretic.

Book Notices.

Reference Handbook of the Medical Sciences. By VARIOUS WRITERS. Illustrated by Chromo-lithographic and Fine Wood Engravings. Edited by ALBERT H. BUCK, M. D., New York City. Vol. V. New York. William Wood & Co. 1887. Royal 8vo. Pp. 813. (From Publishers.)

This cyclopædic work, "embracing the entire range of scientific and practical medicine and allied science," is one that will last a lifetime, and is being so well prepared by authoritative writers as to be invaluable to every public library, medical society library, professor's library and phy-

sician's library. In short, every one interested in the study of medicine who is able to get this Reference Handbook, should have it. In continuation of the series, this volume V embraces all subjects that can be alphabetically arranged as a dictionary between MIL and POT—the first title of this volume being *Miliaria* and the last *Pott's Disease*. Very many of the articles in this volume are as full and as thorough as the full chapters in monographic works. In many particulars it is even better than most of the popular text-books.

Diseases of the Female Mammary Glands, by TH. BILLROTH, M. D., of Vienna, and **New Growths of the Uterus**, by A. GUSSEROW, M. D., of Berlin. Illustrated. These two works constitute Vol. IX of the "*Cyclopædia of Obstetrics and Gynecology*," (12 vols., price, $15.80) issued monthly during 1887. New York. William Wood & Co.

We cannot too highly speak of the authoritative value of these two works under one cover. The subjects treated of are such as are of daily importance to the practitioner, and the treatises themselves are altogether practical. Prominence is given to questions ot diagnosis and treatment—the points which mostly interest the ordinary run of doctors. For those who seek scientific information as to etiology and pathology, etc., the work is equally valuable. In short, the selection of these monographs for one of the series of Wood's Library was an excellent one. We have only to repeat the regret that the volume is not sold separately.

Editorial.

The Ninth International Medical Congress,

Which convened in Washington, D. C., September 5th, 1887, and adjourned September 10th, was a success that greatly exceeded expectations. In the way of purely original work, it may be said that there was not much done, and in the way of new discoveries or new inventions but little was brought forward for the first time that is likely to arouse the profession to a new enthusiasm. It is a wrong to judge the success of such an assemblage by such a standard. Such congresses are like great conventions for other purposes. They are not designed for the introduction of that which is new; they are for the purpose of giving a hearing to those who have formulated opinions, and to discuss practices

which have been suggested. They are for the interchange of experiences and observations, and to seek confirmation or rejection of views heretofore held. They are for the dissemination of knowledge that each member has acquired by special investigation and inquiry. We predict that there are few, if any, who attended this Ninth Congress that have not returned to their homes with a broader view of medicine, and who are not less of arrogant empirics than when they left their homes.

No one has a higher respect for true leaders in medical thought than we. But as one reviews the wonderfully extensive and accurate reports, as given in the *Medical Record* and other weekly medical journals of the country, he cannot fail being impressed by the thought that the diffusion of medical information is becoming so extensive that the so-called leaders in medical literature are simply so because of favorable positions held before the professional public.

We had intended giving full reports of the session in our columns, but the amount of material collected for this purpose from various sources would more than fill three annual volumes of a journal the size of any medical monthly published in America. We are, therefore, reluctantly compelled to make no attempt at a report, but to suggest to our readers the propriety of investing 40 or 50 cents in each of the following weekly journals, which give very excellent reports: *Medical Record*, *Medical Register* (Daily Edition), *Medical News*, *New York Medical Journal.*

We have seen in some of our exchanges a tendency to parade the fact that many eminent men in the profession were not in attendance upon the Congress, and thus to argue the failure of the session. It is to be regretted that so many eminent men absented themselves; but, as we examine the general merits of the papers and discussions, it becomes a natural inquiry, Could the eminent absentees have made the Congress a more profitable one? Could they have contributed a better run of papers than were contributed? Could they have made the Congress a more practically valuable one? These eminent absentees did not do more than cause the profession generally to regret that they attempted so much to impair the value of the Congress. They injured themselves far more than they injured those they did not care to see in high places. We predict that, for the most part, were they to have the thing to do over again, they would make themselves more conspicuous by attendance and by active participation in the work of the Congress.

Medical Society of Virginia.

The Eighteenth Annual Session of this body, which is gaining a national reputation, will convene in Richmond, Va., Tuesday night, October 18th, 1887, and will not adjourn until after Friday night's meeting, October 21st. From every portion of Virginia we hear of a thorough arousing of the profession to the importance of this organization, and from every section applications for membership have come in so satisfactorily as to make us feel that the Medical Society of Virginia represents in its membership greatly more than a half of the qualified practitioners of Virginia.

Not only in numerical additions is the Society to be congratulated this year, but in the promise which may safely be made that this Eighteenth Session will be attended by many visitors of eminence from other States. Some of these gentlemen propose practical demonstrations of operations, etc., for which they have gained world-wide renown, provided suitable subjects can be secured for the operations, etc.

While this number is passing through the press, correspondences are being had with railroads that have not yet satisfactorily answered the requests of the Committee of Arrangements, and it is probable that terms will be made with routes not named in the official circular issued some weeks ago. We would suggest to our Virginia readers—especially those who live along the line of routes not named in the official circular issued in September—to inquire of the ticket agents at their respective depots if they have received instructions for reduced rates. As to hotel arrangements, the St. James and St. Claire hotels—each conveniently located for this session—have announcements in the advertising department of this issue.

Let each Fellow of the Society who can do so, bring or send at once at least one application for fellowship according to the prescribed form as given in the Announcement issued in September.

Practical Urinology.

The profession of Richmond has for some years past congratulated itself on having in their midst a microscopist and a chemist of such practical ability and usefulness as Mr. Hugh Blair. In all matters of urinology, his examinations and his opinions resulting from urinalyses have been sought, and are recognized as perfectly authoritative. Time and again has he read to the doctor, as from a book, the pa-

thological conditions of the stomach, liver, kidneys, etc., of his patient, when the doctor himself had been perplexed in accounting for symptoms, and vainly wandering about the therapeutical field in search of the remedy. It is with great pleasure that we now announce that Mr. Blair has yielded to the persuasions of his professional patrons of this city, and now offers his services to the profession at large. We take it upon ourselves to call the special attention of the profession generally to the announcement he has been urged to make in the advertising department of this issue. His charge is very moderate for the services he renders. No patient who has any appreciation of, or any desire for a scientific diagnosis, would in any measure hesitate to pay the small fee which Mr. Blair charges for the information that results from his examinations. Full directions as to how to proceed are given in the advertisement. We scarcely expose a professional secret in saying that much of the accuracy of the diagnoses of Richmond doctors of rebellious cases is due to the fact that Mr. Blair makes the urinalyses.

Hanger's Individual Lasts.

The cure of corns, and the relief from bunions, and the like, after all, is to be sought in the perfection of the fit of the shoe or boot. Mr. J. E. Hanger, whose advertisement is to be found in this issue, has succeeded in devising an absolutely perfect fit. No one who patronizes him and receives the benefit his lasts warrant, will fail to be a "drummer" for these "lasts." He will feel like running around to tell his friends what a good thing he has found in the last. All we ask is, *try them*, and then the *painful* reader will understand why we give this willing mention of the device.

Thompson's Bromine-Arsenic Springs Water.

We regret that there was even a temporary cessation in supplying the trade with this water owing to the exhaustion of the supply of bottles. This misfortune will be provided against in the future. The records of cures of the various ailments for which we predicted this water would be useful are pouring in so rapidly as to fill a book. In a short while a systematized catalogue or pamphlet will be prepared and distributed. In the meantime, consult the new advertisement on pages 14 and 15 before reading pages.

The Climatologist

Is a new quarterly of 48 quarto pages, with an annual subscription price of only 50 cents, begun September, 1887, in Baltimore, Md., under the editorial charge of Dr. George H. Rohé, whose fitness for such an undertaking is well established. As there is no other journal in the world occupying the special field proposed by this one, it is to be hoped that this effort, under such able hands, to establish a journal devoted to medical and sanitary climatology, and to the investigation of the merits of mineral springs and health resorts, wil be eminently successful.

Randolph-Macon College

Has an excellent new feature. See advertising page between advertising pages 32 and 33.

Clinical Reports.

[The following CLINICAL REPORT was accidentally omitted by the printers from its proper position among the other *Clinical Reports* in this issue. As it was accepted for the October number, and as our space will be limited in the November number, we have decided to insert it here—even out of its appropriate place.]

Case of Purpura Hæmorrhagica.—Extensive Sloughing—Loss of Penis, etc. By S. W. BUDD, M. D., Petersburg, Va.

Mr. George G., æt. 28; occupation, railroad conductor; weight, 168–170 pounds; height, 5 feet 10 inches. Family history good. Patient never had syphilis or rheumatism, and no illness since childhood. General health perfect, till, about two years ago, he began to pass sections of tape-worm at varying intervals up to the present time. General health not apparently affected. Appetite capricious, eating no meat or fowl, nor vegetable, except tomatoes; living mainly on sweet things for the past two years.

About ten days before the present illness he had a bilious attack, and was in bed two or three days. Having passed a part of a tape-worm, an emulsion of pumpkin seed was given, bringing away about 25 feet more of the worm, with the head. A tonic was ordered. Patient was discharged. On March 15th he felt well and started to the depot to report for duty. On his way he felt a pain in the right ankle, which he referred to an old sprain and decided to rest it a few days before going to work. At night the ankle was swollen and

painful, with a few spots like flea-bites on the skin. The pain was worse next day; and I saw him at night, complaining of rheumatic pain in the right ankle, which was swollen, with considerable œdema on the dorsum of the right foot. Around the ankle and up the leg were purpuric spots, varying from the size of a flea-bite to a quarter dollar. On the left leg there was deep-seated pain in the calf of leg, but no swelling at that point, but there was slight puffiness about left ankle-joint; no constitutional disturbance except loss of appetite. It had the appearance of rheumatic purpura. I ordered alkaline treatment (Rochelle salts). The next day, third day of attack, purpuric spots were larger on the leg; pain in right elbow, followed by œdema of forearm and hand; itching of skin; petechial eruption. Put him on salicylic acid. Did not see him again till the seventh day.

During my absence (for three days) the swelling gradually extended up the arm to the shoulder and across the chest. On the night of the sixth day he complained of sore throat, so painful as to prevent sleep. Deglutition painful and difficult. By 10 o'clock of seventh day he was unable to swallow at all. Fluids returned through the nose, accompanied by swelling of the face, followed shortly by purpura.

About 1 o'clock I received a message that Mr. G. was dying, and on arriving found the report not so greatly exaggerated. A more distressing object I never saw. The œdema of the face was altered beyond recognition. The eyelids were as large as hen's eggs, and of a deep purple color. Beneath the conjunctivæ there was a sheet of bright red blood. The forehead, nose, lips—the entire face—were frightfully swollen and discolored by effused blood beneath the skin, extending under the scalp, resembling a man most brutally beaten or stamped in the face. He was sitting up in bed, with head thrown forward—a profuse ropy secretion pouring from his mouth, too tenacious to be expectorated, and which threatened to strangle him if he lay down. The tonsils and palate were very œdematous. Purpura covered the entire body—the spots varying from one-third of an inch to several inches in diameter, not raised above the level of the skin, except a few bullæ, the largest on the dorsum of the right forearm, which was swollen to four times its natural size and looked gangrenous. Being unable to swallow, hypodermic injections of ergotine were given, with hot astringents sprayed into the throat every few minutes. It was remarkable with what rapidity the œdema came on and shifted its position. The change in an hour was perceptible to every one. It diminished over the brow and increased

in the neck, and a corresponding change was taking place internally, subsiding in tonsils and upper pharynx (allowing the patient to swallow), and gradually settling down over the glottis. By 3 o'clock P. M. his suffering was dreadful. The secretion in the throat was more tenacious, and added materially to his suffering from œdema of glottis.

After consultation with Drs. Leigh and J. H. Claiborne, a mixture of the carbonate and muriate ammonia was given, and a 20 per cent. ointment of oleate mercury was freely applied to the neck. For several hours his life hung as by a thread, each respiration being more difficult, skin pallid and in a cold sweat.

By 7 P. M. his breathing was easier, and the œdema of glottis gradually disappeared.

On the eighth day patient much exhausted; no hæmorrhages from any mucous surface. Ordered a mixture of tincture of iron chloride, potash chlorate and quinine every four hours.

On the ninth day œdema of mucous membrane of mouth. Lips very protuberant; tongue an inch thick and protruding between teeth.

On the tenth day stinging pain in penis, accompanied by great restlessness and nervous irritability, followed by œdema of that member and scrotum, and a dark spot on under side of penis at beginning of anterior third. The discoloration gradually extended back to the scrotum, and by the twelfth day a gangrenous spot an inch in diameter at site of first appearance. Dr. J. H. Claiborne called in consultation. Temperature, 102°; pulse, 120—full, compressible. Anæmic bruit over base of heart. Tongue heavily coated; bowels torpid; abdomen tympanitic. Kidneys acting freely; urine high colored; chemical examination negative; no casts. Bowels moved by salines. Tartrate of iron and potash and digitalis ordered, with free administration of milk and whiskey.

The general œdema of face and extremities had now entirely gone, and the purpura passed through the successive changes in color.

On the 13th day a second eruption appeared, confined to right hip, lower part of abdomen and back. Like all preceding and subsequent eruptions, it was ushered in by rheumatic pain in the joint, formication and itching of skin, followed in a few hours by purpura.

The gangrenous spot finally loosened at the edges, and an extensive slough of skin and subcutaneous fascia of the entire penis (except about an inch on dorsum next to pubic

arch) began to separate. Portions were cut away from time to time, leaving the lifeless glans penis attached to the body only by the urethra. This was snipped off with scissors. By the twenty-fifth day all the slough had cleared off, leaving a pointed ragged stump. The corpora spongiosum suffered the most. There was a button-hole into the urethra large enough to admit the large end of a lead pencil and through which most of the urine escaped. The raw surface extended on dorsum to within an inch of the pubic bone, on the under surface reaching to and *on* to the scrotum for an inch or more.

Twenty-ninth day, extremely anæmic; pulse, 125–130; very weak. Ordered mixture—

℞.—Pot. chlor.. .....ʒj.
Hydrarg. bichlor.....gr. ss.
Liq. arsen. chloridi.....gtts. xx.
Tr. ferri. chlori.....ʒij.
Aquæ q. s.....ʒvj.

M. S.—Tablespoonful doses.

Thirty-first day, patient's general condition improved since separation of slough from penis. Nourishment confined to milk, cream and whiskey, and beef extracts (Valentine's and Bovinine). Iron and digitalis every four hours. Seen by Dr. Wm. B. Gray, of Richmond. There was found marked consolidation of lower lobe of right lung. Dr. Gray suggested ammon. tinct. guiaicum and glycerine, $\bar{\text{aa}}$ ʒj; fld. ext. ergot, gtts. xx t. i. d., with 20 drops tr. ferri. chloridi and quinine every four hours. After four or five days the mixture unfortunately disarranged his stomach, and he went back to his iron and digitalis every four hours till convalescence was well established.

On thirty-fifth day, suffered acute pain in right shoulder for several hours. It was not relieved by hypodermic morphine, as similar attack two weeks previously had been. It was followed by a great oppression—sense of weight over sternum. Nothing gave relief; twelve hours later, suffering no less; pulse 136, weak, compressible; temperature 102°. Ordered grs. x carbonate ammonia every two hours; second dose relieved him entirely. From this time his improvement was uninterrupted though slow. He got up on the sixty-seventh day of sickness, but was not able to stand alone. Penis well; the contraction of cicatrix draws it down to one side, and in relaxed state it is not over an inch long. At no time of the attack was there loss of blood from any mucous surface—either nose, stomach, bowels or kidney. He returned to duty at the end of four months.

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ART. I.—**The Choice of General Anæsthetics in Surgery and Obstetrics.*** By HUNTER McGUIRE, M. D., LL. D., Ex-President American Surgical Association, Ex-President and Honorary Fellow Medical Society of Virginia, etc., Richmond, Va.

Mr. President—I believe the members of this Society will generally concur in the wisdom of the Committee in selecting for discussion to-day the subject announced, "The Choice of General Anæsthetics in Surgery and Obstetrics."

For forty years medical journals and books have been rich in articles on the different general anæsthetics. Papers almost innumerable have been written on nitrous oxide, chloroform, ether, bichloride of methylene, and five or six other agents—all except the first belonging to the class of alcohols or ethers; but comparatively very few discussions have been heard, or articles written, upon the relative value and dangers of the different anæsthetics. What anæsthetic to use is an important, often vital question, and to most of us one of daily occurrence, but it is still undecided. The two principal agents, chloroform and ether, have been in

*This was the title of the subject for general discussion before the Medical Society of Virginia, in session in Richmond October 19th, 1887. Dr. McGuire was the Leader. Notes of further discussion of this subject will be found under head of *Reports of Societies*.

use for many years—ether since 1846, and chloroform since 1847—but the profession is undetermined which is the safer and better. I may say in passing, but without any intention of discussing the idea, for it has, I think, been definitely settled as erroneous, some writers have stated that the use of any anæsthetic lessens the success of operative surgery.

In France, except in the city of Lyons; in Germany and Austria, except in the city of Vienna, chloroform is almost exclusively given. In Italy chloroform is generally preferred. In Great Britain chloroform, and mixtures of chloroform with other anæsthetics are principally employed; probably about one-third of the administrators use ether, and some nitrous oxide alone, or combined with ether. Dr. H. W. Boone, of Shanghai, informs me that chloroform is the agent chiefly used in China. In this country ether is the agent principally given in the Northern and Western States, and in the Southern States chloroform is chiefly administered. From this it will be seen that chloroform, by itself, or combined with other anæsthetics, is much more frequently used than ether. How much more frequently we have no means of accurately determining, but taking obstetrical cases along with the surgical, it may safely be said that to-day, throughout the civilized world, chloroform is given twenty times where ether is administered once. The question as to the relative advantages and disadvantages of these two agents can only be eventually disposed of by the combined experience of many observers. The experience of no one man, or no small set of men, can determine the question; and until associations like this scientifically investigate and answer it, some will give ether, some chloroform, some nitrous oxide, bromoform, bromide of ethyl, etc., as their custom, fancy or convenience may decide.

Neither your patience nor the time allowed by the Committee for this paper, and the discussion to follow, will permit me to attempt an exhaustive essay on this subject, and I propose to restrict what I have to say to the relative value and danger of the two principal general anæsthetics in use, chloroform and ether. I shall confine my remarks chiefly

to what I have myself observed in the almost daily use of one or both of these agents. I hope in this way to open the discussion, and to elicit the personal experience of members of this body.

It may be suggested that in the rapid advance and progress of science, it is probable some other anæsthetic, safer and better in every way than either chloroform or ether, will soon be discovered, and the discussion of the relative value of these agents become unnecessary; but we must remember that many years of very patient observation will be needed to settle the fact that some new agent is safer and better, and that we of this age and generation will not likely live to see it. I venture to predict that when the experience of the civilized world is collected and analyzed, it will be found, if indeed it is possible to definitely settle such a question, that in certain cases ether should be given, and in certain other cases chloroform employed, and that every good surgeon will be expected to exercise discrimination in the selection of his anæsthetic. For myself, I am wedded to neither of these agents. In general terms, in feeble, very anæmic people, or those suffering from the prostration of shock, or loss of blood, I prefer ether; in either the young or the old, or in cases when cardiac, renal or pulmonary trouble is suspected, as a rule, I think chloroform is safer. Accidents occasionally follow the administration of both ether and chloroform, this, too, in the hands of competent and most skillful men. Already between four and five hundred deaths from chloroform have been reported, and nearly if not quite one hundred deaths from ether. What the ratio of either of the agents is to the number of inhalations, we are so far unable to determine. That both agents sometimes kill the patient, the most bigoted and partizan advocate of either ether or chloroform must admit. But which one of the anæsthetics is more dangerous and apt to kill is the paramount but undetermined question. Safety of the patient is the important point, before which all else should yield; compared to that, convenience, comfort, time, money and everything else are as nothing.

The tracings of the sphygmograph show invariably dur-

ing the inhalation of chloroform, marked depression of the heart and circulation. In anæsthesia from ether, this is only occasionally seen, and then it is not so marked. The sphygmograph shows that depression of the vaso-motor functions and cardiac paralysis is more likely to occur from chloroform than from ether; that the former is much the more powerful and dangerous agent; but clinical experience shows that when the vapor of chloroform is withdrawn, and consciousness returns, the patient is free from all danger from the anæsthetic. In ether, several minutes after the vapor is taken away, and after all danger from the anæsthetic is supposed to have passed, when all ether vapor we would think had escaped from the lungs, dangerous symptoms suddenly present themselves, from which the patient is with difficulty rescued, or even death itself takes place. Or again, hours or even days after ether has been given, acute nephritis or pneumonia, directly traceable to the ether, occurs, threatening the life or causing the death of the patient. We may say, then, that chloroform is the more powerful and immediately dangerous anæsthetic; that when it kills it does so suddenly, shockingly; but that when the vapor is withdrawn and consciousness begins to come back, the danger is absolutely over. Ether may kill as chloroform does, just as suddenly, during the operation, but it is much less likely to do so. The danger from this anæsthetic is, however, not over when the vapor is removed; alarming symptoms or death may occur, by cardiac paralysis, a few minutes after, or by acute nephritis or pneumonia, hours or days after the administration. I think with regard to the selection of an anæsthetic this much is established, that in acute or chronic diseases of the kidneys or lungs, ether is more dangerous as an anæsthetic than chloroform.

I spoke only of paralysis of the heart in connection with chloroform, because it is the most common mode of death in fatal cases, probably more common than all the other causes combined; but we all know that this is not the only mode of death from either of these anæsthetics. Both ether and chloroform, especially the latter, may kill by using too concentrated a vapor; both may kill during the period of

muscular excitement, or by paralysis of the respiratory nervous centre.

In selecting the anæsthetic, I am somewhat governed, other things being equal, by the character of the assistant who is to administer the narcotic. If he is inexperienced or unskillful, or nervous, and disposed to attend to the duties of every one around him and neglect his own, ether is the safer. To give chloroform requires skill, and the ability not always possessed by an assistant, of attending strictly to his own business. A man accustomed to give ether is not always a safe administrator of chloroform. To ask a patient to take long, deep or rapid inspirations of chloroform vapor is very dangerous. The greatest danger from this agent is in the early stage of its administration; long before unconsciousness occurs, when, by a too concentrated vapor, or by its too rapid administration, the nervous centres presiding over the heart and circulation may be surprised and overwhelmed. And when a patient in pain, or in dread of the knife being used before unconsciousness takes place, breathes rapidly and deeply in order that he may more quickly become narcotized, it is safer to partially or for a time completely remove the chloroform. I think it safer, too, when practicable, to keep the patient's head turned to one side in using chloroform, so that the vapor, four times heavier than air, may not occupy the base of the cone and exclude the atmosphere. In giving chloroform it is better to begin with a small quantity and allow with the vapor plenty of fresh air, and gradually accustom the patient to its use. Never surprise or alarm him with vapor too concentrated or abundant. Never give chloroform in a hurry.

The use of ether does not demand so much care, although, if what I have stated with regard to its dangers is correct, a certain amount of skill and caution should be observed. This, after using it very often, is the impression I have of it; but in a Northern city, where, in the opinion of the profession, to give chloroform is almost a penal offence, I saw ether administered with a recklessness which astonished and alarmed me, and I lost my interest in the opera-

tion being performed in watching the purple, asphyxiated patient, and wondering why he did not die; and why he did not, I confess, was beyond my comprehension. I understood then why men who gave ether in that way were, and well might be, afraid of chloroform.

The plan of giving alcohol, as a heart stimulant, just before administering chloroform, is, in my opinion, liable to serious objections, and for many years I have abandoned its use in this way. In the first place, it is difficult to know in all cases what a stimulant dose of whiskey is, so much depends upon the habit and temperament of the patient, or the depression which disease, injury or mental apprehension has produced. A stimulant dose of whiskey in one man may be a sedative dose in another, and in all cases the secondary sedative effect of the alcohol may come on, especially if the anæsthesia is kept up for some length of time, and add to, rather than prevent the depression. I am satisfied that alcohol increases the duration and violence of the stage of excitement, and makes nausea and vomiting more likely to occur during and especially after the operation is completed. We all agree that men accustomed to the free use of liquor are bad subjects for anæsthetics, and my observation leads me to think that a dose of whiskey before giving chloroform averts no danger, but rather adds to this, as well as to the general discomfort of the patient.

I was surprised to see, a few days ago, a paper on chloroform, written by a very deservedly eminent surgeon of New York, in which he advocates giving a very small dose of chloroform, say 20 or 30 drops, to be administered in a concentrated vapor. If alarming symptoms set in, this amount of vapor could be speedily pumped out of the lungs by artificial respiration. This is dangerous doctrine to teach, and, coming from so prominent a man, calculated to mislead others. In the only death from chloroform that has happened in my hands, the action of the heart stopped instantly. I was giving the vapor myself; had my finger on the woman's pulse, and the first indication of danger was the sudden stoppage of the heart. It did not flutter, or intermit, or grow weak, but abruptly ceased, and this while

the patient was yet conscious. Although all means were tried to resuscitate the patient, I knew when it happened that no power could ever make that heart beat again. It was like the syncope of concussion of the brain; the contractile power of the heart was annihilated; and I am sure that the advocate of small doses of concentrated vapor of chloroform will find, when disaster comes, that he may remove from the lungs all of the vapor by artificial respiration; but he cannot in this way take away the impression he has produced on the nerve centres, which have stopped the heart's action. He may as well say he will not apply a blazing torch to the fuse which leads to a magazine of powder, but that he will use only a spark of fire, and if danger comes, he can blow that out.

There is one hazard from chloroform which, although we are frequently taught we apt to forget—that is, operating during partial anæsthesia. I believe we are all liable to forget this great and unjustifiable danger, of beginning or performing an operation before the patient is fully under the anæsthetic. Many of the deaths from chloroform have happened in this way. A tooth is to be drawn, a pile tied, a felon opened, or some operation performed which is the work of a few seconds; and the inclination is to operate before the anæsthesia is complete. It is extremely hazardous to do this. Possibly the brain has not lost consciousness, and the patient is dimly aware that the operation has begun, that the pain he dreads is to follow, and in consequence of his terror, fatal syncope comes on; or if intellectual consciousness is lost, there seems to be —if I may so speak—a consciousness still left in the nerve centres, which preside over the heart and circulation, and the impression of pain on them is fatal. Ether is safer when the operation is to be performed with partial anæsthesia.

In all operations about the face or throat, where blood or other fluids may escape into the wind-pipe, ether is the more dangerous, and chloroform the safer agent to use. I do not think I ever saw the irritability of the larynx or trachia entirely lost in anæsthesia from chloroform, but

I have seen this happen in ether cases; the sensibility or reflex irritability is for the time abolished, and foreign substances easily find their way into the wind-pipe. Possibly the cold vapor of ether may to some extent account for this fact.

In the beginning of this paper, I said that I thought chloroform the safer agent in cardiac troubles. I wish to except from this class a nervously weak heart. In organic valvular disease of the heart, with the usual compensative muscular hypertrophy, I have given chloroform hundreds of times, and never had cause for alarm. On the contrary, the heart's action became usually more quiet and regular, and chloroform is safer here than ether. But in a heart weak from fatty degeneration, or from loss of blood, or great anæmia from other causes, any anæsthetic is hazardous, but chloroform, I believe, is more dangerous than ether.

Of all the elements of danger, to my mind, from chloroform, fear on the part of the patient is the greatest. If the patient is, so to speak, in mortal terror of the anæsthetic, the heart is nervously weak, and the hazard to life is especially great. All things being equal, ether, then, is the safer agent to use. To the dread of the operation the patient may have added the hazard of the anæsthetic, and the emotional condition be one of absolute terror. Fatal cases under such circumstances are not uncommon. A few words of encouragement from the administrator, or a calm, confident manner on his part, may allay the anxiety; but if it does not, and the great alarm continues, it will be safer to give hypodermically $\frac{1}{4}$ gr. of morphia and $\frac{1}{100}$ of a grain of atropia, and wait fifteen or twenty minutes for the physiological effects of these drugs before giving the anæsthetic. Emotional excitement greatly increases the chances of paralysis of the nerve centres which preside over the circulation. Morphia obtunds the sensibility of the nervous system, and at the same time is a cardiac stimulant. Atropia is probably still more powerful in this direction, and the employment of these drugs under such circumstances will lessen or completely remove the danger. I think both reason and clinical experience have confirmed this fact.

I am sure that the emotional excitement of fear has not had its due weight with operators. It is not altogether possible to explain its physiological effect upon the nervous system, and the heart and circulation. It varies so much with the sensibility or emotional nature of the individuals. With some it is fixed, and impossible to allay; with others it is transient, and easily removed; with some its effect upon the nervous system is profound, lasting, and dangerous; with others this impression is trifling and evanescent. It is impossible always to estimate its power or effect; but that it is an important element of danger all observant administors will admit.

Children take chloroform well and safely. I believe the most zealous advocates of ether confess that chloroform is safer and better for them. The principal reason for its safety in children is that they are ignorant of its danger, and are not afraid of being killed by it. How else can we satisfactorily explain the comparative immunity from danger to the young?

It is a significant fact, too, that Nussbaum has seen in military life 40,000 administrations of chloroform without an accident; and that in the Confederate Army Corps to which I was attached, as Medical Director, chloroform was given 28,000 times without a death ascribed to its use. Can these facts be explained by the age, sex, health, etc., of the soldiers. I think not; because men of the same age, health, etc., sometimes die in the hands of civil surgeons in chloroform anæsthesia. In military life, I know, not simply from theory, but from actual observation, that the pain of a gun-shot wound, and the danger from it to life, or loss of limb, makes the soldier dread the hazard of chloroform very little—if at all.

It is a significant fact, too, in this connection, that chloroform has been given to hundreds of thousands of women in child-birth; and when the agent was in the hands of competent men, but one fatal case has occurred, and in this solitary instance it was by no means certain that death was due to the anæsthetic. Even when surgical operations have been required and performed in ob-

stetrical cases, no deaths have occurred from its employment. Indeed, so far as we can see from the experience of thousands of cases, chloroform is absolutely safe in parturient women, even less dangerous than a dose of ergot, or oil, or opium. How can we explain this great and entire exemption from danger when using chloroform in obstetrical cases? We cannot account for it by the sex of the patient, or the small quantity given at a time, for in other conditions death sometimes results from small doses. Her age has nothing to do with it. She is likely stronger and more healthy during the child-bearing period of life than in youth or old age; nor does this same condition of age, or strength, or health, avert the danger from chloroform in other cases not obstetrical. The recumbent position surely does not explain it; for while this position in anæsthesia, from both chloroform and ether. should, when possible, be always observed, many deaths from chloroform and ether have happened to patients in the recumbent posture. Have the pains of labor anything to do with this exemption? I believe not; for we have pain from the surgeon's knife, and from the disease or injury for which the operation is performed. The pains of labor too, often stop for several hours. I think we can only explain this absence of danger from chloroform in obstetrics by the absence, on the part of the patient, of any dread of the chloroform. As a rule, so far from any fear of it, she begs piteously for it, and her condition renders her absolutely free from that emotional state which depresses the heart and circulation.

I would like to speak, if time permitted, of the importance of using pure articles of chloroform and ether; of giving first ether, as I have sometimes done, in cases of functionally weak hearts, and substituting chloroform before anæsthesia is complete; of changing the anæsthetic when one is found to act badly, or dangerous symptoms arise; and several other points in regard to the selection of anæsthetics; but I forbear. I hope some of these topics will come up in the general discussion of the subject.

Before closing this paper, I am sure the Society will unite with me in deploring the sometimes bitter and partisan de-

bates so often seen in discussing the question of the relative value of ether and chloroform. Some, who give exclusively one of these anæsthetics, will scarcely tolerate the discussion of the comparative safety and value of the other. Statistics, general facts, and clinical experience have no weight with them, and denunciation takes the place of argument. Some who give chloroform say in effect, unjustly I know, that the administrators of ether are wanting in moral courage, and are afraid of public opinion; that they would rather subject their patients to the hazards of the after-consequents of ether than the immediate dangers of chloroform; that the latter is less frequent, but when it does occur, communities are more shocked and frightened by it. Some of those who give ether, as bitterly and vehemently denounce the men who give chloroform. In the last text-book on surgery, issued this year, you will find the following: "In general, there is no comparison between these agents; ether is so much safer than chloroform that the latter is fast disappearing in practice. The estimated death rate after ether is 1 in 20,000; in chloroform, 1 in 3,000; seven lives are sacrificed to chloroform to one by ether." Such statements are the outcome of prejudiced brains, and absolutely unwarranted by any facts or figures known to the profession. In the discussion of a purely scientific question, the proper solution of which may involve human life, such feeling should be avoided. Let those who prefer one of these agents, give to his fellows who select the other, credit for equal honesty, and the same desire to save human life and suffering. Surely the bigotry and intolerance we unfortunately sometimes see in theological and other debates, and the partisan rancor often found in political contests, should have no place in questions like the one under consideration.

"USED Tongaline in a case of neuralgia of the pericardinol, and secured permanent relief from two doses of a teaspoonful each. Have also found it infallible for rheumatism.—J. R. FORTSON, M. D., Kiowa, I. T.

ART. II.—**Coca—Its Preparations and Their Therapeutical Qualities, with some Remarks on the so-called Cocaine Habit.*** By WILLIAM A. HAMMOND, M. D., Surgeon-General U. S. Army, Retired List; Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital, etc., etc., New York, N. Y.

It is not my intention to consume the time of the Society by entering into the clinical history of the erythroxylon coca, or of the voluminous literature of which it and its active principle have been the subject; neither shall I devote much attention to the observations, interesting though they be, of other physicians and surgeons. I shall confine my remarks, therefore, almost entirely to an account of my own experience with these very important remedies. That experience, based as it is upon the results obtained by the administrations of coca and its preparations to others, as well as those drawn from a large personal experience of coca and the hydrochlorate of cocaine, will I trust be of interest to the members of the Medical Society of Virginia.

I have employed three preparations of the coca leaves—the fluid extract, the wine, and the hydrochlorate of cocaine.

The first of these, *the fluid extract*, acts well in some cases when administered in the dose of one to two fluid drachms three times a day; but it is extremely disagreeable to the taste, is apt to excite nausea, and, moreover, being the extract of the leaves, as a whole contains substances that interfere materially with the action of the active principle of the drug. These are chiefly tannin and a resinous substance to which the nauseous taste is mainly due. It is rarely the case that the fluid extract is admissible with children, its having proved in my hands irritant to their delicate stomachs to such an extent as to cause vomiting shortly after being taken. It seems to be better tolerated in persons of advanced years, in whom perhaps these otherwise deleterious substances may be beneficial from their astringent and tonic qualities. These matters are, I think, in a great degree antagonistic to the action of the cocaine, and present insupera-

*Read before the Eighteenth Annual Session of the Medical Society of Virginia, in Richmond, October 20th, 1887.

ble objections to the employment of the fluid extract when we desire to obtain solely the action of the alkaloid.

The like objections are applicable to the various *wines of coca* as they are usually prepared. The Indians of Peru and Bolivia, it is true, make use of the coca leaves; but experience has taught them how to get the best results from their employment. They never chew them in their simple state, but make them into a mass with lime, and then subject them to the action of the saliva. By this process the alkaloid is in a measure separated, and is absorbed into the system while the woody fibre, tannin and extractive matter are ejected from the month. But all the wines of coca (and their number is legion) are preferable, so far as taste and effect are concerned, to the fluid extract; and for a considerable time I employed them in lieu of some better preparation as found in the market, and as made by various manufacturers. As the result of my experience, however, I found them to be generally uncertain, and often absolutely inert, except so far as regarded the wine entering into their composition, and this was often of the cheapest description. Analyses made by myself and others have shown that they vary greatly in the amount of cocaine which they contain, and that some of them are almost entirely free from this essential constituent; for a wine of coca without cocaine is like the play of Hamlet with the part of Hamlet left out. This deficiency is especially marked in a wine of coca of foreign manufacture which has had a large sale in this country, and which contains something less than half a grain of cocaine to the pint bottle.

Disappointed in the result of my administration of these wines of coca, and recognizing the fact that wine is the best menstruum through which the active principle can be given, I represented to Messrs. Thurber, Whyland & Co., prominent grocers and druggists in New York, and who I knew had an exceedingly competent chemist in their employ, the expediency of preparing a wine of coca that should contain a fixed proportion of cocaine, and at the same time be free from the tannin, resin, and other inert or deleterious substances present in the leaves. I also insisted upon the point

that the wine used in its manufacture should be full-bodied and absolutely pure. In a short time they submitted to me a wine of coca containing two grains of the hydrochlorate of cocaine to the pint, and absolutely free from tannin and resinous matter. This preparation leaves nothing to be desired; the wine used in its manufacture is the juice of the grape uncontaminated by foreign substances. The taste would be pronounced pleasant by everybody, and the proportion of cocaine is large enough to give a medium dose, about the sixth of a grain, to each wineglassful.

This wine of coca I have found beneficial in all cases of *spinal irritation*, and especially so in those in which there is that distressing irritability of the stomach that is so frequently one of the phenomena of the disease. As you all know, it is not unusual to meet with instances of this disorder in which there is vomiting with or without nausea the instant food of any description is taken into the stomach. In such cases the wine may be given in teaspoonful doses, repeated every five minutes until eight or ten doses are taken. The first portion may be rejected almost as soon as it is swallowed, but the second will be retained longer, and the third longer still, and the fourth will probably not be thrown up at all. After tolerance is thus established the wine may be given in larger quantities, say a wineglassful just before eating, with the effect in most cases of producing entire relief of the gastric irritation. It may then be continued, so long as may be necessary, as a medicinal agent of great value in curing the spinal irritation and acting as a tonic to the system. Indeed, not only in cases of spinal irritation is the wine of coca beneficial, but in all instances in which it is desirable to increase the vital powers. Coca appears to be, as has been heretofore observed, the one agent that can be thus employed without fear of the depression that so generally follows the use of other stimulants.

I made some use of this wine of coca as a special *tonic to the vocal apparatus*, and I am quite sure that it possessed great value in which fatigue follows the excessive use of the voice, or in which the voice breaks down in the midst of

some supreme effort. Where such fatigue or failure is to be feared a full claret glass of the wine taken just before beginning to speak or sing will almost invariably accomplish the object in view. Several of my patients—lawyers, clergymen, actors and other public speakers—have, after taking it according to my directions, avoided the unpleasant consequences which had previously followed their efforts. A lady, an opera singer, not however a patient of mine, but under the care of a brother physician, was apprehensive that she would have to give up her profession in consequence of a notable failure of her voice after an hour's work. There did not appear to be in her case any disease of the larynx other than a functional paralysis of the vocal chords, probably of hysterical origin. However that may be, a wineglassful of the wine of coca, taken after she had been singing a few minutes, effectually prevented the catastrophe, and in a few weeks entirely cured her so that she was able to do without the agent.

But I have made more use of this wine of coca in cases of *cerebral hyperæmia* than in any other affection. This disorder is generally the result of excessive mental exertion or of intense emotional disturbance. Nothing can be more beneficial in its action than is this remedy; dispensing with all other stimulants, I advise the patient to take a claret glassful of wine with each meal. The influence is felt almost immediately, the vital powers seem to be at once restored, and the mind soon regains its former vigor. If the sleep has been disturbed or absent it becomes regular and in sufficient quantity after the remedy has been taken for a few days. These cases, passing as they do under the names of nervous prostration and neurasthenia, general debility, etc., are those in which the influence of the wine of coca is most distinctly shown.

In another form of mental depression which is not infrequently an accompaniment of hysteria in the female, or of a like condition in the male, and in which there is usually some disorder of the generative system, this wine of coca is invaluable, and may be often relied upon to effect a cure without the administration of any other medicinal agent.

Under its use the emotions become more expansive, the disposition to brood over imaginary, or at least very slight troubles, disappear. Tears are no longer shed over mere nothings; the countenance loses its expression of utter hopelessness and thus an important step toward a successful therapeutical result is at once obtained. In such cases I give the wine continuously for several months. I have never had any difficulty in causing the patient to stop its use.

It is impossible in a paper like the present to enter upon the consideration of or even to mention the many morbid states of the nervous system in which I have found this wine of coca beneficial. They will suggest themselves to all of you without further reference on my part. I will only say, that my experience has in general been that of many other physicians who have used it, and have made known the results which they have obtained, and which are sufficient to establish the fact of the great value of the wine of coca as a tonic and stimulant to the weakened or exhausted nervous system. There are many diseases, such as fevers, dysentery, heart and lung affections, and especially in malarious disorders, in which I have had no personal experience of its action, but, in which physicians of eminence, who have used it in cases of such diseases, speak of it in the highest terms. That it is not followed by the depression of mind and body that so generally ensue upon the use of other excitants is certainly very remarkable, but it nevertheless is a circumstance that seems to admit of no doubt.

What is true of the wine of coca is true, though in a more marked degree, of its active principle, the *hydrochlorate of cocaine,* and which even for internal administration should often be preferred. In regard to this substance my experience has also led me to very definite conclusions. The hydrochlorate of cocaine is best known as a local anæsthetic in operations about the eye, nasal cavities, etc. But it is likewise an inestimable remedy in certain affections of the nervous system in which a speedy and decided result is desired.

About two years ago I undertook a series of experiments with this agent on myself, with the object of obtaining more

satisfactory information relative to its action than it seemed possible for me to get otherwise. I began by injecting a grain of the substance under the skin of the forearm, the operation being performed at 8 o'clock, P. M.

The first effect ensued in about five minutes, and consisted of a pleasant thrill which seemed to pass through the whole body. This lasted about ten minutes and shortly after its appearance was accompanied by a sensation of fulness in the head and heat of the face. There was also noticed a decided acceleration of the pulse with increase of force. This latter symptom was probably, judging from subsequent experiments, the very first to ensue, but my attention being otherwise engaged it was overlooked. On feeling the pulse five minutes after making the injection, it was found to be 94, while immediately before the operation it was only 82.

With these physical phenomena there was a sense of exhilaration and an increase of mental activity that were well marked and not unlike in character those that ordinarily follow a glass or two of champagne. I was writing at the time, and I found that my thoughts flowed with increased freedom, and were unusually well expressed. The influence was well felt for two hours, when it gradually began to fade. At 12 o'clock, four hours after the injection, I went to bed, feeling, however, no disposition to sleep. I lay awake till daylight, my mind actively going over all the events of the previous day. When I at last fell asleep it was only for two or three hours, and then I awoke with a severe frontal headache. This passed off after breakfast.

On the second night following, at 7 o'clock, I injected two grains of the hydrochlorate of cocaine into the skin of the forearm. At that time the pulse was 84, full and soft. In four minutes and a half it had increased to 92, was decidedly stronger than before and somewhat irregular in rhythm. The peculiar thrill previously mentioned was again experienced. All the phenomena attendant on the first experiment were present in this, and to an increased degree. In addition there were twitching of the muscles of the face, and a slight tremor of the hands noticed especially in writing. In regard to the mental manifestations there was a

similar exhilaration as in the last experiment, but much more intense in character. I felt a great desire to write, and did so with a freedom and apparent clearness that astonished me. I was quite sure, however, at the time, that on the following morning, when I came to read it over, I would find my lucubrations to be of no value; I was therefore agreeably disappointed when I came to peruse it, after the effects of the drug had passed off, that it was entirely coherent, logical, and as good, if not better in general character, as anything I had previously written.

The effects of this dose did not disappear till the middle of the next day, nor until I had drunk two or three cups of strong coffee. I slept little or none at all, the night being passed in tossing from side to side of the bed, and in thinking of the most preposterous subjects. I was, however, at no time unconscious, but it seemed as though my mind was to some extent perverted from its usual course of action. The heat of the head was greatest at about 12 o'clock, and at that time my pulse was 112, the highest point reached. I had no headache until after arising, and the pain disappeared in the course of the morning.

Four nights subsequently I injected four grains of the hydrochlorate of cocaine into the skin of the left forearm. The effects were similar in almost every respect with those of the other experiments except that they were much more intense. The mental activity was exceedingly great, and in writing, my thoughts as before appeared to be lucidly and logically expressed. I wrote page after page, throwing the sheets on the floor without stopping to gather them together. When, however, I came to look them over on the following morning, I found that I had written a series of high flown sentences altogether different from my usual style, and bearing upon matters in which I was not in the least interested. The result was very striking as showing the difference between a large and excessive dose of the drug, and yet it appeared to me at the time that what I was writing consisted of ideas of very superior character and expressed with a beauty of diction of which I was in my normal condition altogether incapable.

The disturbance of the action of the heart was also exceedingly well marked, and may be described best by the word "tumultuous." At times, beginning within three minutes after the injection, and continuing with more or less intensity all through the night, the heart beat so rapidly that its pulsations could not be counted, and then its action would suddenly fall to a rate not exceeding 60 in a minute, every now and then dropping a beat. This irregularity was accompanied by a disturbance of respiration of a similar character, and by a sense of oppression in the chest that added greatly to my discomfort.

On subsequent nights I took 6, 8, 10 and 12 grains of the cocaine at a dose, but I will not detain the Society with a detailed account of the effects produced. It will be sufficient to say that they were similar in general characteristics though of gradually increasing intensity in accordance with the dose taken to that in which 4 grains were injected. In all there was great mental excitement, increased fluency of thought, and exaggerated disposition to write, the matter written being disconnected and at times almost incoherent, though it appeared to me at the moment to be wonderfully logical and profound. In one, that in which 12 grains were taken, I was conscious of a tendency to talk, and as far as my recollection extends, I believe I did make a long speech on some subject of which I had no remembrance the next day. In all, the action of the heart was increased, was irregular in rhythm and force to such an extent that I was apprehensive of serious results. Insomnia was a marked characteristic, and there was invariably a headache the following morning. In all cases, however, the effects passed off about midday, and by evening I was as well as ever.

Up to this time I certainly had not taken a poisonous dose of cocaine, or one that had produced any serious inconvenience. My experience had satisfied me that a much larger dose than any I had up to that time injected might, in my case at least, be taken with impunity. A consideration of the phenomena observed appeared to show that the effects produced by 12 grains were not very much more pronounced than those following 6 grains. I determined, therefore, to

make one more experiment, and to inject 18 grains. I knew that in a case of attempted suicide 23 grains had been taken into the stomach without seemingly injurious effect, and that in another case 32 grains were taken within the space of three hours without symptoms following of greater intensity than those I had experienced.

I had taken the doses of 8, 10 and 12 grains in divided quantities, and this dose of 18 grains I took in four portions within five minutes of each other. At once an effect was produced upon the heart, and before I had taken the last injection the pulsations were 140 to the minute and characteristically irregular. In all the former experiments, although there was great mental exaltation, amounting at times almost to delirium, it was nevertheless distinctly under my control, and I am sure that at any time under the influence of a sufficiently powerful incentive I could have obtained entire mastery over myself, and have acted after my normal manner. But in this instance, within five minutes after taking the last injection, I felt that my mind was passing beyond my control, and that I was becoming an irresponsible agent. I did not feel exactly in a reckless mood, but I was in such a frame of mind as to be utterly regardless of any calamity or danger that might be impending over me. I do not think I was in a particularly combative condition, but I was elated and possessed of a feeling as though exempt from the operation of deleterious influences. I do not know how long this state of mind continued, for I lost consciousness of all my acts within, I think, half an hour after finishing the administration of the dose. Probably, however, other moods supervened, for the next day when I came downstairs, three hours after my usual time, I found the floor of my library strewn with encyclopædias, dictionaries, and other books of reference, and one or two chairs overturned. I certainly was possessed of the power of mental and physical action in accordance with the ideas by which I was governed, for I had turned out the gas in the room and gone upstairs to my bed-chamber and lighted the gas, and put the match used in a safe place, and undressed, laying my clothes in their usual place, had

cleaned my teeth and gone to bed. Doubtless these acts were all automatic, for I had done them all in pretty much the same way for a number of years. During the night the condition which existed was, judging from the previous experiments, certainly not sleep, and yet I remained entirely unconscious until 9 o'clock the following morning, when I found myself in bed with a splitting headache and a good deal of cardiac and respiratory disturbance. For several days afterward I felt the effects of this extreme dose in a certain degree of languor and indisposition to mental or physical exertion; there was also a difficulty in concentrating the attention, but I slept soundly every night without any notable disturbance from dreams.

Certainly in this instance I came very near taking a fatal dose, and I would not advise anybody to repeat the experiment. I suppose that if I had taken the whole quantity in one single injection instead of in four, over a period of twenty minutes, the result might have been disastrous. Eighteen grains of cocaine are equivalent to about 3600 grains of coca leaves, and of course, owing to its concentration, capable of acting with very much greater intensity.

I am not aware that a fatal dose of cocaine has yet been indicated by actual fact. Probably 18 grains would kill some people, and perhaps even smaller quantities might, with certain individuals, be fatal. But these are inferences and not facts; but so far as I know there is not an instance on record of a person dying from the administration of cocaine. So far as my experiments extend (and I think it will be admitted that they have gone as far as is safe) I am inclined to think that a dose sufficient to produce death would do so by its action on the heart. Certainly it was there that in my case the most dangerous symptoms were perceived. The rapidity, force, and marked irregularity of the pulse all showed that the innervation of the heart was seriously affected.

It is surprising that no marked influence appeared to be exercised upon the spinal cord or upon the ganglia at the base of the brain. Thus there were no disturbances of sensibility (no anæsthesia, no hyperæsthesia) and no interfer-

ence with motility, except that some of the muscles, especially those of the face, were subjected to slight twitchings. In regard to sight and hearing, I noticed that both were affected, but that while the sharpness of vision was decidedly lessened, the hearing was increased in acuteness. At no time were there any hallucinations.

Acting from the data thus obtained, I have used the hydrochlorate of cocaine to a considerable extent in my practice, but always by hypodermic injections when employing it in its pure state. For internal administration, I have, as already mentioned, used the wine in preference; but recognizing the power of the substance when locally applied to mucous membranes to diminish the calibre of the blood-vessels of the part and to produce anæsthesia I should use it in certain affections of the stomach upon the same principle as it is at present applied to the nasal mucous membrane, the pharynx, and the larynx, should cases requiring its employment come under my observation.

I have derived great benefit from its administration hypodermically in cases of *melancholia*, and in others of *hysteria* characterized by great depression of spirits. In such case a half grain may be injected under the skin, and if necessary the quantity gradually increased to two grains. I have never given more than this quantity to a patient at one time, but I have frequently reached this point without having yet witnessed any deleterious effects. One injection given daily for three or four days will often make the most dismal melancholic cheerful, and what is remarkable is the fact that the improvement is permanent. In the case of a woman strongly hysterical, and who had not spoken a word for several months, a single injection of a grain (a rather large dose to begin with, but one which I thought proper under the circumstances) broke the spell in less than five minutes, and there has up to this date—and nearly a year has elapsed—been no return of any hysterical symptom.

I have used it also with entirely satisfactory results in two cases of *neuritis*, in both instances affecting the radial nerve, and attended with great pain, partial paralysis of the mus-

cles supplied by the nerve, and numbness of the thumb, index, and outer half of the middle finger. The injection was made at the point over the nerve where the greatest pain was experienced, and the point of the syringe carried deep so as to come as near as possible to the nerve. Half a grain of the drug was injected every two hours until in the one case eight, and in the other ten injections were made. From the first introduction of the drug the symptoms began to subside, and after the last injection was made there was no return. I have not yet had an opportunity of using it in sciatica, a disease extremely likely to be benefited by its use. In such a case I should make the injection at the upper part of the sciatic nerve, and should endeavor to throw it in to the substance of the nerve itself.

Undoubtedly there are other cases of *neuralgia* in which the hydrochlorate of cocaine could be used with advantage, but they would have to be those in which it could be placed very near to the inflamed part of the nerve, for of course it is only by its local action that it could have any effect in these diseases.

I do not speak here of its use in connection with certain *affections of the eye*, such as conjunctivitis, granular lids etc.; nor of its employment in *rhinology or in laryngology*, though I shall in a few minutes have a few words to say with reference to its application to the nasal mucous membrane.

We have heard a good deal of the *cocaine habit*, a habit which I am very sure has *no existence* as such. I do not deny that there are morphia-eaters who, having heard that cocaine is an antidote to the morphia habit, have endeavored to cure themselves with it, and being deprived of full powers of judgment and of will, have ingrafted the cocaine on the morphia habit, producing thereby an exceedingly bad combination. But that there is any such thing as a cocaine habit pure and simple which the individual cannot of his own effort altogether arrest, I emphatically deny. The injection of half a grain to a grain produces a certain degree of mental exhilaration which is pleasurable, and which attends upon a repetition of the dose; but there is no weakening

of the will power, such as is produced by morphia, and no craving for the drug such as opium and its preparations cause. I have given it to many patients, male and female, for several weeks continuously, and have never had a single one object to its administration being stopped. There is not so much trouble in ceasing its use as there is in giving up tea or coffee, and nothing like so much as is experienced by those who cease using alcohol or tobacco. Within a space of a few months, Dr. Bosworth, of New York, took, I think, between 500 and 600 grains, and stopped without suffering the least inconvenience.

The *Medical Record* of Sept. 3d, 1887, contains a very interesting paper on "Cocaine and its Fascinations, from Personal Experience," by Dr. Frank W. Ring." Dr. Ring made use of a solution of hydrochlorate of cocaine nightly for ten months in the form of a 4 per cent. solution applied to the nasal mucous membrane by means of an atomizer. About two grains were used at each application. The account of his experience is exceedingly interesting, but I shall not touch upon that portion of his paper at present. I will, however, quote from him this paragraph, premising that during the ten months he had taken more than 600 grains.

"July 9th, I came to the conclusion that the medicine was getting to be a necessity; that it might become a source of injury to my well-being, and I calmly decided to stop it, which I did. The inclination for it often seizes me, but I crush it with the perfect confidence that I shall never again indulge in its enchantments."

And now I come to another stage of my personal experience, which I think is both interesting and instructive. About the first of March last I was attacked by a *violent rhinitis*, different in character and of far greater intensity than any that any rhinologist I have consulted has ever witnessed, and of a form not laid down in the books. There was great swelling of the nose and face, the discharge during the first stage of an exceedingly acrid and thin fluid, and the formation subsequently of a membraniform substance not very unlike that present in diphtheria, but very

loosely attached to the membrane, and showing no disposition to extend beyond the nasal cavities. Nothing gave me such relief as the application of a solution of the hydrochlorate of cocaine by means of cotton-holders, camel's hair pencils and atomizers. Generally I used a 4 per cent. solution, but not infrequently one of 10 per cent., and occasionally one of 20 per cent. I used it night and day almost continuously during the months of March, April, May, June, and to the middle of July. From the 16th of July to the 24th of August I was absent from New York at Mackinac, Michigan. During that period I had no rhinitis, and I took no cocaine. From the first of March to the 16th of July I applied an average of 20 grains a day to the nasal mucous membranes. Of course nothing like this quantity entered the system, but I was careful to carry it far enough back till I tasted it in the throat, when it was generally swallowed. I used, therefore, about 600 grains a month. The effects of it upon the system besides its local influence were a slight mental exhilaration, and sometimes an indisposition to sleep when I had taken more than my usual quantity. I was not confined to bed a single day, nor did I fail any day to discharge all my professional duties. I missed four lectures at the Medical College, but that was not from any effect of the cocaine, but solely from the nature of the disease with which I was affected, and which prevented me from speaking clearly.

On the 16th of July I stopped the use of cocaine without the slightest difficulty, nor did I resume it again for six weeks.

But two days after my return, August 26th, I had another of my old attacks, and I again began the use of cocaine. From that date to October 1st I have used nearly 800 grains in application to the nasal mucous membrane. On the 1st of October I ceased taking it, and again without the slightest difficulty. On neither occasion of my stopping its administration did I experience the slightest craving for it or inconvenience.

So far as I know, I shall not take it again unless I should be the subject of another attack of rhinitis, when I shall

certainly resort to it as the one agent, *except stenocarpine*, which I have used once (and which I think is preferable) capable of affording relief to an inflamed, painful, turgid, and altogether uncomfortable nasal mucous membrane.

Proceedings of Societies, Boards, etc.

MEDICAL SOCIETY OF VIRGINIA *

The Eighteenth Annual Session convened in the Capitol Building, in the city of Richmond, Va., *Tuesday night*, 8 o'clock, October 18th, 1887. A very large audience of ladies and gentlemen not doctors were present to witness the opening of the session. The session was called to order by the President, Dr. Bedford Brown, of Alexandria, Va. After prayer by Rev. S. S. Lambeth, of Broad-Street Methodist Church in this city, Dr. Thos. J. Moore delivered the *Address of Welcome* in his usual style of elegance.

The President then introduced Dr. Wm. S. Christian, of Urbanna, Middlesex county, Va., who delivered the *Address to the Public and Profession*, and announced as his subject:—*Some of the Difficulties in the Way of the Successful Practice of Medicine.* He classified the difficulties as those that necessarily belong to the profession of medicine, and those incidental thereto, or produced by persons and things outside of the profession.

Dr. Wm. D. Turner, of Ferguson's Wharf, Va., as Chairman of the Committee on Nominations, presented a list of seventy-four applicants for Fellowship, which the Committee had approved, and on motion the gentlemen were elected Fellows. This number includes all who joined during the session.

The registration of those in attendance being finished, it was found that about two hundred and twenty Delegates, Visitors and Fellows, were in attendance during the session. Among the distinguished delegates and invited guests were Drs. William A. Hammond and Milton Josiah Roberts, of New York city, George H. Rohé, of Baltimore, and J. S. Conrad, of St. Denis, Md., Joseph Taber Johnson, of Washington, D. C., Thos. R. Evans, of Mt. Carbon, W.

*Compiled mostly from notes made for *Journal American Medical Association.*

Va., and last but not least, Honorary Fellow, Dr. Robert Battey, of Rome, Ga.

On presentation by Wm. L. Robinson, of Danville, Va., amended by Dr. J. S. Wellford, of Richmond, it was:

Resolved, That the Committee on Publications have discretionary power to select papers offered the Society, and publish such as they may deem suitable for the *Transactions*.

In regard to guests by invitation, so as to make them authoritative, on presentation by Dr. Geo. Ben. Johnston, of Richmond, it was

Resolved, That a Committee be annually appointed by the President, which shall be known as the "Committee on Invitations." This Committee shall invite to attend the sessions of the Society such distinguished non-residents as it may see fit; and to this Committee must be submitted the names and addresses of all candidates for invitation.

Resolved, That this Committee's invitation shall carry with it the privileges of participating in the Society's proceedings.

On motion by Dr. C. W. P. Brock, of Richmond, a resolution of congratulations was telegraphed to Dr. James L. Cabell, of the University of Virginia, on the semi-centennial of his Professorship, etc.

Second Day.—After the usual routine proceedings of organization on *Wednesday morning*, Vice-President, Dr Alex. Harris, of Jeffersonton, was invited to assume the Chair.

The President, Dr. Bedford Brown, of Alexandria, then proceeded to deliver the *Address of the President*. His subject was: *The Advantages of the Practical Study of Medical Science as a Means of Promoting Professional Success*. The proposition contained in the title was well sustained by facts and logical deductions, but the address does not permit a suitable synopsis within our limited space.

The next order of business being the discussion of the regularly selected subject, the appointed leader of the discussion, Dr. Hunter McGuire, of Richmond, read a paper on **The Choice of General Anæsthetics in Surgery and Obstetrics.***

On invitation by the President, Dr. William A. Hammond, of New York, N. Y., said that while listening to the paper of Dr. McGuire, he felt that he was sitting at the feet of a master. And yet as he had had experience with both ether and chloroform, especially while surgeon in the U. S.

* We publish this paper in full, as Article I, in this number, with the consent of the author and Publishing Committee.

Army years ago, he felt that he had a right to an opinion on the subject under discussion, which he would take the liberty of expressing.

He had been one of the unfortunates who had witnessed two deaths from the surgical use of chloroform. His first fatal case occurred about 35 years ago, while he was serving as an Assistant Surgeon in the U. S. Army, out on the Western frontiers. A dragoon had been drunk, and had very seriously hurt his arm. He did not see the dragoon until about two weeks afterwards. He then undertook to examine the injury by first placing the patient under chloroform. Just as he was getting under the influence of the anæsthetie, the dragoon died suddenly. Previous to the administration, there was nothing to indicate that he could not take chloroform. But upon post mortem, when his heart was taken out, and cut up into minute sections, and placed under the microscope, that organ was found to be undergoing the process of fatty degeneration. This condition could not have been recognized by the naked eye—it required the microscope to detect it. Nor was the condition sufficiently far advanced to allow of its diagnosis by physical signs or any of the usual symptoms of advanced fatty degeneration. There is no way known to him by which such cases can be foretold; and yet he could not resist the conclusion that the fatty heart was the cause of that dragoon's death. There was nothing else to possibly account for it. The case was reported at the time in the *American Journal of Medical Sciences.* The chloroform was carefully examined, and found to be good. The second case of death by chloroform under his observation occurred in Virginia. Just after the memorable battle near Fredericksburg, during the late war, a soldier was brought in who needed exsection of the elbow. The circumstances of the battle made it desirable that he should be a little in a hurry. Just as he was picking up his knife to begin the operation, the soldier died suddenly —without a moment's warning, exactly as Dr. McGuire had described his case as dying. Since then he has not used chloroform much, but has adopted ether in preference. Whether he had mortality or not from the use of ether, he does not pretend to say—especially after what Dr. McGuire has said about the more than possible after-effects of its administration. But this he has to say, that he has never been horrified by a sudden death while using it. In fact, he does not think he has ever had any bad effects from the

use of ether. He wishes he thought chloroform was as safe to use as ether, for undoubtedly chloroform is much more agreeable both to the patient and administrator. He wishes he could make more emphatic than Dr. McGuire has already done the great importance of not being in a hurry when about to give chloroform. For army uses, ether, he thinks, is unquestionably to be preferred.

As to how—the *modus operandi*—these anæsthetics kill, he is unable to satisfactorily explain. Chloroform undoubtedly kills by stopping the heart's action in the majority of cases, but why, he does not know. As to ether, its immediate dangers are so much less than those of chloroform that he prefers it. As to the after-effects of this agent, Dr. McGuire is most probably correct in saying that deaths are due to it that are not attributed to it in the mortuary tables.

Some years ago a Frenchman, whose name has just now escaped his memory, proposed venous *injection of chloral hydrate.* The anæsthetic lasts from 7 to 8 hours. Dr. Hammond has adopted the measnre in only one case. It was a case in which he determined to stretch the sciatic nerve. He injected a solution of chloral containing seven grains of chloral into the cellular tissue, instead of making it intravenous. Anæsthesia followed in a few minutes and lasted five hours, with sleep most if not all the time. The nerve was stretched according to the usual method without any sensation of pain.

Another good anæsthetic is *hypnotism,* but is liable to much abuse in the hands of charlatans. The patient hypnotized is not absolutely insensible, but the cutting of the surgeon cannot be said to be painful. It does not seem that more than about one in five or six are proper subjects for hypnotism, and it cannot well be determined who are fit subjects until the experiment is made upon the individual. The process is not due to the party who operates, but to the susceptibility of the person to be acted upon.

As to local anæsthesia, he thinks that we have recently found an agent that is superior to cocaine. Soon after reading the wonderful reports of Dr. J. Herbert Claiborne, Jr., (who he learns Virginia has a right to claim as one of her sons), in regard to the so-called *stenocarpin,* he began some observations with it upon his own person. First of all, he found that the name stenocarpin is a misnoma—that the agent is not stenocarpin at all, but that it is an extract of the ordinary honey locust, the technical term being *gleditschea*

*triacantha.** The leaves are boiled down to pulverizable pulp and allowed to dry, so that an extract is the result, and not an alkaloid. The chemical composition of this extract is $C_{20}H_{21}NO_3$. A 2 per cent solution of this extract is used.

Dr. Hammond is the subject of hay asthma. He has submitted to treatment by specialists of commanding repute for its cure, but had settled down on cocaine as his remedy until gleditschin—miscalled stenocarpin—was brought to his notice. Under its local application he had had the nasal mucous membrane cauterized with the galvano-cautery, without pain. He could hear the electrode burning, and smell the fumes of the burning tissues, but felt absolutely no painful sensation. Whenever he feels the slightest sensation of discomfort about the nasal passages, he applies a few drops of the solution to the membrane with a camel's-hair pencil—perhaps twice a day—and derives benefit that is far beyond that derived from cocaine.

Dr. George H. Rohé, of Baltimore, Md., said he was much pleased with the fair manner in which Dr. McGuire had opened the discussion. As to the danger of paralysis of the heart during chloroform administration, he thought the proper explanation might be that given by Brunton. Chloroform paralyzes the vaso-motor centres, while during other narcosis the vaso-motor centres continue active for a much greater length of time. As to the rarity of deaths from chloroform given during labor, he thought Barnes' explanation a satisfactory one. It is that during gestation the heart undergoes a conservative hypertrophy, and hence has greater power to resist the paralyzing influence of chloroform. This condition of the heart does not occur usually in cases that are brought to the attention of the surgeon for operation. Generally speaking, in such cases the disease or injury demanding the use of the surgeon's knife is such as to impair the tone of the heart, either for the time or permanently. In surgical cases, also, the dread of the anæsthetic, or the manner of its administration, acts as a shock to the nervous system. As to the prevalent opinion about the immunity of children from the dangers of chloroform, as remarked upon by Dr. McGuire, Dr. Rohé quoted from authorities to show that about one in ten of all deaths from chloroform occur in children under twelve years of age. He

*It is proper to state in this connection that these remarks by Dr. Hammond were made before the more recent publications as to the origin of the so-called gleditschin, etc., which have appeared in some journals since the adjournment of the session of the Society.

thought, also, that Dr. McGuire's statistics could stand correction as to the stage of the administrations when the greatest danger presented. He referred to authorities to show that about one-half of all fatal cases from chloroform occurred either during the surgical operation or else immediately afterwards. He believed it to be good doctrine to always advise the administration beforehand of a suitable use of atropia with morphia. This combination maintains anæsthesia, while it at the same time keeps up the activity of the vaso-motor centres. He agrees with Nussbaum in objecting to the use of ether before beginning with chloroform. There have been two deaths from chloroform in Baltimore during the last two years. He has given ether in the manner that Dr. McGuire opposes; but he has never seen the depressing effects upon the heart, but upon the respiratory organs. To sum up, he believes ether safer than chloroform in the large majority of cases.

Dr. Herbert M. Nash, of Norfolk, Va., has now changed his preference from chloroform to ether when an operation is to last over half an hour. He believes chloroform kills chiefly by depriving the nervous centres of the requisite amount of oxygen. He has seen distressing effects come from ether. Contrary to Dr. McGuire's opinion, he thinks the presence of pain has an influence in overcoming the paralyzing influence of chloroform. In children, his experience has confirmed the preference expressed by Dr. McGuire for chloroform.

Dr. J. S. Wellford, of Richmond, Va., said that during his service as surgeon in the Confederate Army he could not get ether as freely as he wanted it, and hence had to use chloroform, and one death came under his observation. That death was probably due to mythylated chloroform, received from England. Methylated chloroform is cheaper than ethylated. The purity of the chloroform is, therefore, a very important matter. Anxiety on the part of the operator, especially if he is in haste, may cause him to overdo the matter and "crowd" the chloroform so as cause suffocation. Ether is safer under such circumstances, because it contains a very large per cent. of oxygen. Anstie has shown that air containing over five per cent. of chloroform is dangerous. Death has frequently occurred before commencing the operation after the administration of chloroform. Given internally, it is a valuable anæsthetic, the full virtues of which use have not been sufficiently dwelt upon by authors. Two-thirds of the

deaths from chloroform have occurred in the dental chair, showing the great danger of administering this agent while the patient is in less than the prone position. One, if not the chief, reason why we do not have fatal cases in obstetrical practice is because chloroform is given to allay the suffering from "pains" that throw the blood into the cerebral circulation. In surgical cases there are no pains when the patient is under the influence of the anæsthetic. Anstie has shown that the genito-anal region and the matrix of the great toe are about the last regions of the body to become anæsthetized. Hence, operations about these parts require more chloroform than other cases, and hence the great number of deaths that occur from anaesthesia when these parts are to be operated upon. The purity of the agent is an important matter, and the matter of administration is just as important. Such was the harmlessness of chloroform administration in the Confederate army that even hospital stewards often gave it. The secret was undoubtedly due to the fact that they were taught the importance of having a plenty of fresh air mixed with the chloroform during its administration. There is danger in giving chloroform to those whose hearts have been overtaxed, as by prolonged intoxication. Ether deaths are frequently attributed to intercurrent pneumonia, and hence are not put down as deaths from the anæsthetic. He ventures to assert that when the true record of deaths by anaesthetics is written up, as many fatalities, if not more, will be found to be due to ether; but they are of secondary occurrence. His conclusion is that they are both dangerous, perhaps in about equal ratio. Hence, do not give either unless there is a clear indication for one or the other.

Dr. I. S. Stone, of Lincoln, Va.. remarked that for operations requiring only a few moments he preferred *bromide of ethyl* to ether or chloroform. He thinks it much safer than chloroform and does not carry with it the dangers attributed by Dr. Wellford to ether.

Dr. Hammond, on being reminded of a case that occurred some time ago in New York, of death attributed to ether, related his recollections of the case.

Dr. Alex. Harris, of Jeffersonton, Va., said he had used both ether and chloroform since their popular introduction into the armamentarium of the doctor. As he has had no accident from chloroform, and as it is so much more agreeable than ether to give and to take, he saw no reason to surrender his preference for chloroform. He always freely

admits air during chloroform administrations. He is not surprised at the record of deaths from its use by those who give it as they would ether. The agents are entirely different chemically, and call for different methods of administration. As a complication of the prolonged or excessive use of chloroform, he has seen jaundice occur.

Dr. J. E. Chancellor, of the University of Virginia, said he has used and been a close observer of the use of both of the anæsthetics since their introduction. He has settled upon the combined use of ether and chloroform as safer than either of the two alone, and says further that the combination acts more quickly. He has also used the combination of one-third alcohol and two-thirds chloroform; and asked Dr. McGuire if he had any experience with such a combination?

Dr. McGuire replied that he had frequently used the "A. C. and E. mixture," but has abandoned it because he gets some of the dangers of *both* ether and chloroform by its use, whereas the danger of either alone is as much as he is willing to be responsible for.

Dr. Chancellor said he had seen one death under the use of chloroform, but is unwilling to testify whether the anæsthetic or the shock of injury killed the patient.

Dr. W. T. Oppenheimer, of Richmond, Va., remarked that all cases of ether deaths are by no means recorded. He had witnessed two deaths by this agent in New York city. One of the cases was in the practice of Dr. Keith. The ether was being given for the operation of excision of the knee. The other case appeared in the practice of Dr. Bryant. He has since adopted chloroform, and prefers it. Chloroform is specially preferable if there is the hæmorrhagic diathesis. In fact, in the case of hæmorrhage from the lungs, bleeding was several times arrested for three or four hours by the repeated administrations of chloroform.

Dr. Thos. R. Evans, of Mt. Carbon, West Va., arose principally to say a word for the country doctor. He is usually unable to carry around with him more than an ounce or so of any fluid preparation. He has several times derived the desired anæsthesia by giving *chloroform internally* in teaspoonful doses. This dose will sometimes anæsthetize for several hours at a time, and by common consent, this practice seems to be less risky to the patient's life. He does not know why it is not more generally adopted.

Dr. E. W. Rowe, of Orange C. H. Va., has had no death from either, but has been scared by both especially when

administered soon after eating. He inclines to a preference for chloroform, being always careful as to the time and mode of its administration.

In answer to questions, Dr. Hammond said he has had no experience with *rapid breathing* as an anæsthetic, but has known it to cause convulsions simulating those of epilepsy. As to *chloral*, the solution of 7 or 8 grains should be given as different injections in different parts of the body. He has had one death from chloral. The patient was in the habit of taking 20 grains three times daily. After about a year or so of such habit, sudden stupor came on, and he died. The exact manner of his death was uncertain.

Dr. Wm. W. Parker, of Richmond, Va., thinks he was the first doctor in this State to use chloroform after its announcement as an anæsthetic. One of his patients years ago had got in the habit of using it to such an extent as to use $3,000 worth in three years' time, and finally died from it. Properly given, he thinks chloroform the safer of the two anæsthetics. It should not be given from a cone or buttoned shirt cuff or anything else of that kind. The safe way of administering it is for the patient to lie down, with clothing perfectly loose, and for the doctor to use an open napkin or a suitably shaped sponge. This is to be moistened with a few drops of chloroform as often as it evaporates, and held three or four inches above the nose and mouth. In this way, all danger of not having enough of fresh air is avoided, and the patient is not overwhelmned by the vapor, so to speak. Exercise a little patience, and all will go well. In this way, on one occasion, he gave chloroform almost continuously, night and day, for three weeks, without an alarming or threatening symptom.

Dr. ———, said that the prior use of atropia without the morphia would be an antagonist to the action of an anæsthetic. The morphia was essential in giving direction to the action of the atropia.

Dr. J. Grammar, of Halifax C. H., Va., thought that prominent mention should be made of *whiskey* as an anæsthetic in such a discussion as this. He referred to a case that came under the observation of Dr. J. Herbert Claiborne, of Petersburg, Va., where a woman who was drunk passed entirely through all the pangs of labor without the slightest evidence or after recollection of having had any suffering. During the war many wounded soldiers were operated on without suffering material pain—the anæsthetic being whiskey, because of the lack of chloroform.

Dr. W. L. Robinson, of Danville, Va., while generally preferring chloroform, could not agree with Dr. Wellford in thinking that the presence of "pains" was the cause of the exemption of danger in chloroform administrations during labor. We have pain of the severest kind in many surgical operations where the patient does die. As to the matter of hæmorrhage being checked by chloroform, which has been referred to, he has had hæmorrhages to begin in labor after the use of this agent which he saw no other way to account for than as result of the use of chloroform.

Dr. Bedford Brown, the President, called First Vice President Dr. Harris to the Chair in order that he might refer to a case which he had years ago. A boy, aged 17 years was kicked by a horse, removing a large portion of the frontal bone, and injuring the anterior lobes of the cerebral hemispheres. Singularly the mental condition remained good; but the injury so exposed the brain to view as to allow of excellent opportunities for examination. To apply the proper surgical dressings, it was necessary to resort to an anæsthetic to relieve the suffering. A mixture of chloroform and ether was used. It was the first case on record where an opportunity was allowed to witness the effect of chloroform, etc., on the brain circulation. With each administration of the anæsthetic, the brain was seen to become anæmic—almost bloodless. The natural pulsations were seen to gradually fade away as the anæsthetic became more and more profound, until finally the brain seemed almost bloodless. The observations were repeated six times so as to confirm the fact that the condition was due to the anæsthetics. Whether it was the chloroform or the ether that caused this condition of things, he does not pretend to say, as neither agent was used alone, but in combination.

Dr. McGuire in closing the discussion, said that as to the dangerous symptoms that have been observed during the administration of anæsthetics, the profession agrees that ether is not safe in diseases of the kidneys. He had not undertaking the task of writing an exhaustive paper on the subject, but had tried to confine himself chiefly to some mooted points in the hope of getting new light on them. He fully agrees with Dr. Wellford that the purity of the agent, whether it be ether or chloroform, is a very important matter. In dentistry, there are two causes of danger. One is the upright or only half reclining position in the chair; and the other is the inclination of the dentist to pull the tooth before there is complete anæsthesia. Mr. Keith, of

Edinburg, has used the Clover bag for ether administration for two hours or more at a time. But such a bag for chloroform would be dangerous. Dr. D. Hayes Agnew, of Philadelphia, has been unfortunate enough recently to add another to the death list from ether; and no one who knows his skill and caution can doubt for a moment but that the ether was properly given by him. It simply illustrates that anæsthetics are dangerous, and should not be resorted to without sufficient justification for the use of such a powerful agent. As a conclusion from his study of the subject, he believes that one anæsthetic is about as dangerous as the other, and that each should be selected on the principle of the special fitness of the subject for one or the other.

During the *afternoon session* Dr. H. M. Clarkson, of Haymarket, Va., read a very elaborate and well prepared report on *Advances in Obstetrics and Diseases of Women and Children* that have been established during the past year or two.

Dr. E. M. Magruder, of Charlottesville, Va., next read the report on *Advances in Chemistry*, which is so full of interesting details that it is impracticable to make a satisfactory synoposis of its contents within the limits of this report.

The Importance of an Early Diagnosis of Occipito-Posterior Positions with Suggestions as to their Management,

Was the title of a paper by Dr. Herbert M. Nash, of Norfolk, Va. He stated that his paper was not intended as a scientific disquisition on the subject discussed, but a practical paper, in which he did not enter upon the description of the causes or mechanism of those positions, their frequency being now admitted by most obstetricians; but contended, that the vertex did not rotate to the symphysis pubis as often as is believed; that the flexion and rotation of the head should be accomplished by art and not trust it to chance, and that when the vertex is not thus brought to the symphysis, the labor is rendered protracted and severe, an unnecessary draught made upon the endurance of the mother, and in the primapara the labor is otherwise dangerous, with great probability of a perineal rupture of serious extent.

In cases of labor in the first stage, where the pains are lingering and unsatisfactory, with little or no descent of the head, and especially where there has been an early loss of the waters, he always suspects malposition, and usually finds the large fontanelle at the left acetabulum, with the

vertex to the right and rear. If the position cannot now be made out with the index finger, he chloroforms the patient and introduces the whole hand into the pelvic cavity, when all doubt is readily dispelled. If the occiput is found to the right and posterior, he uses preferably the left hand, palm to the head of the child, passing the fingers upwards and backwards over the vertex, pulls down the vertex with the bent fingers, while pushing up the forehead with the ball of the hand. After flexion is thus secured, he counsels a continuance of the traction during the prevalence of the pains by the nails hooked over or into the projection of the parietal bones (of the child) beyond and over the occipital bone.

When the fœtal head is found impacted or immovable, he reinforces the manœuvre by the right hand applied to the lower abdominal wall of the mother, and thus raises the whole uterine mass and rendering the flexion and rotation of the head feasible by the pelvic hand.

When this procedure is accomplished, the pains, before futile, now become effectual, and the labor proceeds as in ordinary occipito-anterior positions. This mode of practice necessitates an early recognition of the position, and the exercise of some exertion and skill on the part of the accoucheur at the onset of the labor, but saves much suffering, and frequently the resort to instruments at a later stage. He cites a few cases from consultation practice, merely as instructive and to show how these position, often annoy and confuse intelligent practitioners.

On *Thursday morning*—the beginning of the *third day's session*—after the routine work of opening, the Secretary presented the *Report on Advances in Surgery*, the author, Dr. R. C. Powell, of Alexandria, Va., being prevented from attending by the illness and death of Dr. Albert Fairfax, a Fellow of this Society. Referred to the Committee on Publications.

Dr. I. S. Stone, of Lincoln, Va., read a paper on *Uterine Colic*, which was referred to the Publishing Committee.

Castration Not the Cure for Venereal Desire.

Dr. I. R. Godwin, of Fincastle, Va., read the *Report on Advances in Anatomy and Physiology.* In this Report he mentions the case of a male inmate of the Southwestern (Va.) Lunatic Asylum on whom castration was performed for cure of masturbation. The operation had been performed several years before he was sent to the Asylum. Marriage had had no curative effect over his habit. He showed so

much of the animal and so little of the true husband that his wife left him in disgust. The operation of castration, done at his own earnest solicitation, had been so thoroughly done that not even a vestige of the scrotum was left. But as a result of the castration, not only has there not been a cessation of sexual desire, but he is as capable as ever of erections and is as capable as ever of having venereal intercourse. The sexual orgasm is but slightly obtunded, and the act is completed by the ejection of mucus mixed with the secretions from Cowper's and the prostate glands and the vesiculæ seminales. The desire for masturbation still continues; nocturnal emissions have not ceased, and the man still threatens and has attempted suicide. It would seem from this case that castration does not destroy sexual desire, nor does it cure masturbation; nor does it produce the desired moral impression that we would expect to have in cases of insanity brought about by masturbation.

Dr. William A. Hammond remarked that in making eunuchs, it was the custom to cut out the testicles thoroughly, and also the whole thing—appendages and all. It is not considered safe to leave even a tenth part of the scrotum or any of its contents. And yet with this complete ablation, there are instances of the continuation of the venereal desire. It cannot be denied that the sexual appetite resides in the brain, but in what part he is unable to say. It is well known that criminals in being executed by hanging frequently have seminal emissions. This effect no one would pretend to say was due to venereal excitement in the usual sense of the term; but it does show that the centre controlling the discharge of seminal fluid is to be located high up in the nervous system. It is further well known that extirpation of the ovaries does not necessarily diminish the sexual appetite in the female; and these organs must be taken as the analogue of the testicles. The testicles and the ovaries must be considered, so to speak, as intermediate stations along the nervous track for the discharge of impressions previously received. Years ago, the Missouri law called for castration as the punishment of rape in certain cases, and yet efforts at rape had been committed by persons who had been castrated for this very crime. He narrated several instances that had come to his knowledge where the sexual desire did not seem to be materially, if at all, decreased by castration.

Dr. Robert Battey, of Rome, Ga., in response to the call of the Society upon him for remarks on this subject, stated that his experience had included observation of but one case of

the effects of castration in the male. During the war, when General Sherman was making his historic march to the sea, a colored man was arrested in Middle Georgia for rape. The confusion of affairs at the time made it impossible to take the usual legal proceedings in the case; hence, under a judgment by his neighbors, he was castrated. But it did not seem to have the intended effect of destroying his propensity for women, for he continued to have intercourse with any woman with whom he could gratify his passion, each intercourse being gratified by the ejaculation of a discharge. Of course it was not seminal fluid, for the secreting organ was entirely removed. He has known the sexual appetite to continue likewise in the female, after the perfect removal of the ovaries and clitoris. Early in his experience as an ovariotomist, he announced that "Battey's operation" was not a reliable remedy for nymphomania. Some women, indeed, say that their sexual appetite has not been affected by the removal of their ovaries, etc. In rare instances, in fact, the extirpation of the ovaries seems to have increased aphrodisiac nature; but this apparent effect may be easily accounted for by the want of pain which accompanied the marital relation prior to the removal of the ovaries. He then cited several cases in illustration. It seems to him easy to account for this state of things. He still adheres to the views expressed on this subject in 1873 before the Georgia Medical Association. He compares the ovaries and the testicles, in their developing stage, to a school teacher who day by day impresses lessons upon the nervous system or centres. As the boy or girl loses his or her teacher, the child does not lose thereby what it has learned; but without further education there is no further development. It simply retains the impressions already received. If the woman had developed the venereal appetite prior to the removal of the ovaries, it is more than probable that that desire will remain after the operation just about as it was before the operation. He does not, however, believe that it has ever been shown that where the ovaries were removed previous to development of the venereal desire, the woman operated on has ever developed as anything of an aphrodisiac. There is no case known to him where the ovaries of a *girl* have been removed who ever afterwards developed fully as a woman; and he doubts if such a case will ever occur in the experience of any one.

Bone Surgery.—Report of Operations Performed on Twenty-five Individuals, in which the Electro-Osteotome was Used as the Bone-Cutting Instrument.

Dr. Milton Josiah Roberts, of New York, N. Y., by invi-

tation read a paper on this subject. The electro-osteotome has been in actual use upon the living human subject only since September 8th, 1883. The three objects of his paper were (1), to illustrate the working and method of using what is believed to be the safest, the easiest of management, the most rapid, the most complete and generally efficacious bone-cutting instrument yet brought to the notice of the profession; (2), to illustrate the advantages and methods of using instruments of precision, mathematical formulæ and tables in bone surgery; and (3), to call attention to some novel bone surgical operations. The reading of the paper was made doubly interesting and instructive by the exhibition of the electro-osteotome in action, cutting bone as rapidly as could be desired, and with a smoothness of finish that is rarely attainable with ordinary bone saws or other usual instrument of the surgeon. A very important feature of this paper was the presentation of sphenometrical tables, by means of which, knowing the degree of bone deformity to be corrected, and the diameter of the bone at the site of the operation, the exact dimensions in millimetres of the base of the wedge to be removed in order to correct the deformity can be read off from the tables. The paper was well received, and the success of each of the several demonstrations was roundly applauded.

The Election of Officers

For the ensuing term resulted as follows: *President*, Dr. Benjamin Blackford, of Lynchburg, Va.; *Vice-Presidents*, Drs. H. M. Clarkson, of Haymarket, J. Grammer, of Halifax C. H., and W. D. Turner, of Ferguson's Wharf; *Recording Secretary*, Dr. Landon B. Edwards, of Richmond; *Corresponding Secretary*, Dr. J. F. Winn, of Richmond; *Treasurer*, Dr. Richard T. Styll, of Hollins; *Committee on Publications*, Drs. C. W. P. Brock, George Ross and Hugh M. Taylor, all of Richmond; Dr. W. W. Parker, of Richmond, *Chairman Executive Committee;* to deliver the *Address to the Public and Profession* during the session of 1888, Dr. Wm. T. Walker, of Lynchburg; *place of meeting* of the session of 1888, Norfolk, Va., the time to be some time in November after the 10th of that month.

The following was adopted by a large majority, after the failure of numerous efforts to amend the resolutions as offered by Thomas J. Moore, of Richmond:

Whereas, It has been demonstrated that that provision of the law "Regulating the Practice of Medicine and Surgery" in Virginia, allowing applicants for examination for license

to practise in this State to appear during the vacations of the Medical Examining Board before three individual examiners is a defect in the law;

And whereas, The high mission of the Medical Examining Board of Virginia is seriously hindered thereby; therefore,

Be it Resolved, That the Legislative Committee of this Board, together with a committee to be appointed by this Society, be requested to petition the Legislature to repeal that provision of the law allowing applicants to appear before three individual Examiners.

The President appointed Drs. Wm. S. Christian, of Middlesex county, E. W. Rowe, of Orange county, and J. E. Chancellor, of Albemarle county, as the committee on the part of the Society.

On presentation Dr. by C. W. P. Brock, of Richmond, it was

Resolved, That the committee appointed on the above resolution be also requested to have the law so amended as to require every candidate appearing before the Medical Examining Board of Virginia to present a properly attested diploma of graduation in medicine from some regularly chartered medical school or college before he can be entitled to examination.

Dr. J. E. Chancellor, as a matter of privilege, asked that his resolution of yesterday, advising the Legislative Committee to request the Legislature to so change the existing law as to reduce the number of the Medical Examining Board from 32 of the regular profession to 12, and the homœopathic members in like ratio, be now incorporated as a part of the present proceedings. Granted by a vote of 81 to 6.

On presentation by Dr. I. R. Godwin, of Fincastle, it was

Resolved, That a committee be appointed by the President to memorialize the Legislature of Virginia in regard to fees allowed physicians for examinations of lunatics—the fee at present being only that of any ordinary witness.

During the dinner-hour recess, Dr. Hunter McGuire, by appointment, performed the operation of supra-pubic lithotomy on a young man (with a gratifying result up to the date of this report). Consent was obtained to operate in the Senate Chamber—perhaps the first surgical operation ever performed in that hall.

During the afternoon session, in the absence of the President and Vice-Presidents, Dr. W. D. Turner was called to the chair.

Under call for papers, Dr. A. S. Priddy, of Keysville, Va., read a

Report of a Case of Pistol-Shot Wound of the Abdomen, Treated by Laparotomy, and Suturing the Wounded Intestines.

Negro man, aged sixty, was shot twice, on September 4th, with a Smith & Wesson pistol, calibre 32, distance about six or eight feet. The shooting occurred on a farm, about four miles from the town of Boydton. He at once mounted a horse and rode to town to the doctor, "to have the ball extracted." Dr. C. W. Walker found him falling into a stage of collapse, from which it was several hours before he began to rally. After rallying he was quite restless, had an anxious countenance, was very thirsty; pulse quick and weak; slight hiccough, though vomited none; gave a grain of morphia, and proceeded to examination. The first shot made a flesh wound in the thigh, and the ball was removed. The other shot entered half an inch below the anterior superior process of the ilium, and went into the abdominal cavity He was put to bed, warm applications were made to the bowels, and opium was given to control pain. Passed a comfortable night; bowels not moved; voided large quantity of clear urine. Abdomen had become very tympanitic and was emphysematous, painful and tender. Death seemed to threaten by dyspnoea. On third day after the shooting, a cathartic was given, which acted freely and brought away a quantity of blood. The tympanitic condition was relieved for a day, when it returned. Drs. F. J. Gregory and Priddy, both of Keysville, arrived, in answer to summons, on the fourth night after the shooting. Symptoms of peritonitis were beginning. Laparotomy was performed the next morning under as thorough antisepsis as the circumstances would allow. On opening the peritoneum, bloody serum, pus, etc., having a distinctly fecal odor, came out, yet there was but a trace of fecal matter in the cavity. Dr. Priddy then introduced his hand and slowly drew the intestine out, examined each coil carefully until the jejunum was reached, on the mesentery of which he found a contusion about the size of a dime, which was evidently the point on which the force of the ball had spent itself. The descending colon was lacerated longitudinally over six inches, extending into the sigmoid flexure. He passed his whole hand through this opening into the intestine down to the rectum. The meso-colon was also perforated. The intestines were wrapped in towels wrung out of hot bichloride solution during the

operation, and the normal temperature was preserved as far as possible. The lacerated gut was united by a continuous catgut suture, and then returned into the abdomen. No. 12 Nélaton soft rubber tube was nicked in several places and introduced into the wound as a drainage tube. The abdominal wound was closed by several silk sutures, which also included the peritoneum. Iodoform dressings were used. The well prepared notes of the case indicate progressive improvement, until now the man is sitting up.

Dr. J. R. Sowers, of Warrenton, Va., then read "*A Report of a Case of Abdominal Surgery for Intestinal Obstruction,*" which had come under his care. Man aged sixty-eight had protracted and obstinate constipation. Painful peristaltic actions of the bowels persisted, with gurgling noises. Could not precisely locate the pain. No very great distention; no fever—in fact, temperature a little below normal. During the previous three weeks he had not passed more than a tablespoonful of fecal matter from his bowels, but had had frequent stercoraceous vomitings, until within the past few days. Previous health good, except an inguinal hernia for the past twenty years. But there was nothing to indicate that the hernia had anything to do with the present trouble. Appetite had failed; purgatives had failed, and enemata and the rectal tube did not tend to open his bowels. Dr. Shirly Carter (the family physician), and Dr. Alex. Harris, both agreed that laparotomy was necessary. Dr. Sowers made an incision, five inches long, in median line below the umbilicus. Peritoneum opened on a director. Not more than a tablespoonful of blood was lost in the operation. Passing hand into the abdomen, after careful search finally found a hard nodulated mass in the small intestine in the right inguinal region. It was a coil of ilium adhered to the cæcum and ascending colon by what felt like a sarcomatous growth. Another nodulated mass was found in the transverse colon. About a half-gallon of fluid was in the peritoneal cavity, which was removed by sponges. "As the pathological condition precluded any relief by surgical measures, the intestines were carefully returned and the incision brought together." Nothing notable occurred until the sixth night, when he vomited a large quantity of blood —perhaps a quart—and then grew weaker and weaker until he died on the ninth day.

Dr. L. Ashton, of Falmouth, remarked that all cases of visceral wounds of the abdomen should be thoroughly explored, as hæmorrhages, extravasations of fecal matter, etc.,

will surely kill unless promptly treated. During the past three years, thirty-eight cases of laparotomies for gunshot wounds of the abdomen have been reported, with eleven recoveries. Dr. Senn reports several cases where the wounds in the bowels had been closed by his decalcified bone plates, and in from twelve to eighteen hours the wounds in the bowels were found adherent and closed by plastic material. In regard to Lembert's suture, be careful not to put in too many and do not draw them too tight, so as to intercept vascular supply. He would use catgut ligatures instead of silk. But whatever suture one prefers be careful not to obstruct venous circulation.

Dr. Turner called Dr. Clarkson to assume the chair.

The Value and Proper Use of Arsenic in Skin Diseases

Was the title of a paper read, by invitation, by Dr. George H. Rohé, of Baltimore, Md He cited experiments to show that arsenic modifies especially the nutrition of tissues derived from epiblastic layer of the embryo, the skin and nervous system. The fact that it produces hyperæmia of the skin renders it inappropriate in most cases of acute inflammation, such as *acute* eczema. But in *chronic* eczema, espepecially its papular and scaly forms, and in the pustular form occurring on the face and scalp of strumous children, combined with iron and cod liver oil, it is useful. In pemphigus arsenic acts as a specific. It is a sovereign remedy also in psoriasis. Of course use the local remedies in addition. Arsenic acts as a tonic in syphilitic eruptions. But it is of limited value in acne, most cases of the pustular form being made worse by it. As an exception, however, it often acts like magic in "menstrual acne" in young women. In the rare disease in this country, lichen ruber, arsenic maintains the reputation given it by the elder Hebra. Dr. Rohé uses, in appropriate cases, two preparations—arsenious acid in substance, and the solution of arsenite of potash. Arsenic often fails to do good until after some preparatory treatment. To children he generally gives small doses of calomel every three hours, for three or four days. Then two or three drop-doses of Fowler's solution two or three times daily, increasing the dose by a drop or so daily until its physiological effects are produced, soon accomplish all the good that it is capable of doing. The dose is diminished then according to circumstances. He rarely continues the mercurial preparatory treatment in adults more than a couple of days. Then he gives the following for ten days,

the diuretic action of which seems to prepare the system to derive the fullest benefit from the arsenical course:

℞—Potassi acetat..... ..... ℥j
Ext. taraxaci fl..... ℥j
Aquæ..... .....q. s. fit ℥ij
M.—S. Teaspoonful in a tumblerful of water three times a day, a half hour after meals.

When ordering arsenious acid in substance, he prefers tablet triturates of about one-fiftieth grain each; more frequently one one-hundredth grain each. He generally precedes a dose to be taken between meals by a glass of milk. In this way he has given a fourth-grain of arsenious acid daily for two months, without any unfavorable effect. He directs Fowler's solution with cherry wine or cinnamon water; or for children, equal parts of simple syrup and cinnamon water. As long ago pointed out by Mr. Hunt, the smallest toxic dose of arsenic is fifty times as large as the avorage medicinal dose. Hence the danger of dangerous poisoning by medicinal doses of arsenic is exceedingly remote; and, further—cumulative effects need not be feared, as the drug is rapidly eliminated. He sums up that arsenic, properly used, is a most valuable means of combatting certain skin diseases—most prominently papular eczema, psoriasis, lichen planus and pemphigus; that when intelligently used it is not toxic, and is harmless; and that it is rapidly eliminated from the system, and hence cannot act cumulatively as a poison. Appropriate local treatment is, of course, to be used in every case.

Etiology of Zymotic Diseases

Was the title of the next paper presented by Dr. M. A. Rust, of Richmond, Va. In this paper, which is a continuation of Dr. Rust's former papers on the same subject, *water* and *milk*, in their relations to health and disease are passed in review. In regard to water, Dr. Rust emphasizes that the average farmer has as yet to learn to keep the soil surrounding his well in a healthy condition. He asserts that the same vigilance should be exercised in regard to the *ice supply* as is already practised—at least in cities—in regard to the water supply. He takes a cursory view of the various microbes found in milk, and of the various ways by which milk is contaminated. Sanitary inspection and examination of milk, as now instituted in many cities, is only able to discover adulteration and fraud—the more subtle poison, the living organisms in milk, escaping detection. The only way of securing a supply of pure

milk is to place the whole management of the dairy under the guidance of a responsible medical or sanitary director. He enlarges on the frequent poisoning by ice cream. Tyrotoxicon, a poisonous ptomaine always present in such ice cream, and first discovered by Vaughan (1885 and 1886), is like all other ptomaines, a product of bacterial chemical work. As, under no other known circumstances, does the development of tyrotoxicon take place with such rapidity and redundance as it often does in the ice cream factory; and as no agency apt to promote such rapid development of the poison has been made known, the question arises, whether certain surroundings in which the ice cream comes into being—or as Dr. Rust puts it—whether an infected condition of the womb of which noxious ice cream is born—may not be that promoting factor? We give the concluding remarks on ice cream in Dr. Rust's own words: "Ice cream is not an essential on a wholesome table, and its usefulness in the dietary of the invalid is doubtful. But it is a fashionable dainty, and fashion, moreover, rules that it shall be taken at the end of a meal. Why so? We cannot give fashion credit for reason. Nevertheless, it must be admitted that the abundant secretion of hydrochloric acid, which takes place after a meal in a healthy stomach, is fatal to the microbes which manufactured ice cream may contain. On the other haud, a full quantity of ice cream, taken at the end of a meal, is apt to substract from the stomach more or less of the heat, which is an indispensable factor in the act of digestion. In the individual, however, with impaired gastric function, the microbes meet at all times, before or after meals, with a good chance of life. And if tyrotoxicon be present in the ice cream, no stomach is powerful enough to resist the action of this poisonous ptomaine; it is quickly absorbed, its effect being immediate, like those of strychnine and other poisonous alkaloids. Exquisitely clean, pleasing by the play of its soft colors, refreshing, fascinating, bewitching, is the aspect of this little plate of frozen cream. 'Shall it forever be to us a forbidden fruit?' Get it, my dear frail sufferers—smarting under the sting of bacillus tuberculosis—get it; and delight your eyes with it; and, if temptation be strong, sip a teaspoonful of it. Then, in order to derive sure benefit instead of possible harm, take the rest and—rub your chest with it. From the foregoing it is understood that pure or sterilized milk or cream, in a frozen state, taken in moderate quantity, cannot be hurtful; neither can the usual ingredients and flavorings

of ice cream do harm. But danger is lurking somewhere, and will crop out, may be, only once in a thousand times. There is but one way to combine safety with the enjoyment of ice cream. An Oriental bard of yore, in order to prefigure for his people a state of perfect felicity and safety, drew the following pretty little sketch of still life: 'They shall sit, each man under his vine and under his fig tree, aud none shall make them afraid.' Transcribe this charming verse, and make it read thus: "They shall sit, each woman in her own airy yard, and churn her own ice cream, and no microbe shall make them afraid."

Dr. Samuel B. Morrison of Rockbridge Baths, Va., presented the report on *Advances in Practice of Medicine*, which was referred for publication in the Society's *Transactions.*

Dr. Charles R. Cullen, of Richmond, Va., read a paper on *Medical Paupers*, showing what impositions are frequently practised on doctors by persons who can, but do not pay for professional services rendered by the doctor. His paper concluded with some recommendations to be made to the Legislative Committee, asking for amendments to the laws of the State in regard to the collection of the fees of licensed practitioners.

Dr. Robert J. Preston, Assistant Physician at the Southwestern Lunatic Asylum, at Marion, Va., presented the *Report on Advances in Neurology and Psychology.* Such a report is scarcely susceptible of analysis, but it is a masterly review of many topics in this department, made by a masterly hand. It will appear in the Society's *Transactions.*

The retiring President, Dr. Bedford Brown, of Alexandria, Va., was elected an Honorary Fellow of the Society.

After the usual form of opening the session on the fourth day, Friday morning, Dr. William A. Hammond, of New York, N. Y., by invitation, read a paper on "*Coca, Its Preparations and Their Therapeutical Qualities, with Some Remarks on the So-Called Cocaine Habit,*" (which we publish by permission of the Publishing Committee in this issue as Article II.)

Dr. Wm. L. Robinson, of Danville, Va., remarked that he had used cocaine in a case of a sciatica and with the result he hoped for, after failing with other remedies. He injected a grain near the sensitive point of the nerve. But he had derived imperfect results from the use of cocaine in a case of facial neuralgia. In his own case of rhinitis, it was tried, but he must confess that he would rather have the disease than the effects of the remedy.

Dr. B. L. Winston, of Hanover C. H., Va., said he had used cocaine in a case of vaginisms, but without success. He injected a three- or four-per-cent solution in the vagina. After that failure, he dilated the sphincter vaginæ, and cured his patient.

Dr. Landon B. Edwards of Richmond, thought Dr. Winston's case scarcely a fair test of the value of the agent, because of the small dose. In a case under his care, where the pain of intercourse with her husband was so painful as to make her dread the act, he directed that a sixteen-per-cent solution be applied with a small piece of absorbent cotton to the mouth of the vaginæ, or an ointment of the strength made with cosmoline, some fifteen minutes or so before she anticipated the intercourse. She afterwards said that the cocaine had relieved her to such a degree as to make the marital relationship enjoyable. He was rather surprised at the statement by Dr. Hammond that he did not believe that there was a cocaine habit, in the usual sense of the term, established by the too frequent and immoderate use of cocaine. He had heard of a case in this city.

Dr. Hugh M. Taylor of Richmond, Va., reported the case alluded to by Dr. Edwards, which seemed to show that the habit had become established in this case to such a degree that the patient himself could not correct it. Absolute physical control had to be exercised. He was maniacal long after the withdrawal of the cocaine, and his constant cry all the time was for more cocaine.

Dr. L. Ashton, of Falmouth, Va., said that he had successfully treated one case of opium habit by the substitution of cocaine and then dropping the cocaine. In such a case as Dr. Edwards had reported, he would suggest its use as an ointment made with lanolin.

Dr. J. N. Upshur, of Richmond, Va., said cocaine should be used with extreme caution. He had once applied cocaine for the relief of a hyperæsthetic uterus resulting from a mishap, and the patient became profoundly intoxicated, and so remained for six or eight hours.

Dr. R. H. Slaughter, of Theological Seminary, Va., had used cocaine in a case of vaginismus without success; but he had not used the application in anything like the strength that has been referred to to-day.

Dr. E. W. Rowe, of Orange C. H., thought it too hasty for Dr. Hammond to draw the conclusion that there was no such thing as the cocaine habit, simply because he had not seen a case.

Dr. Rohé, of Baltimore, Md., said he was familiar with the use of cocaine in rectal diseases. He uses suppositories of three grains of cocaine with half-grain of extract of belladonna. It is certainly useful as an anæsthetic in operating on hæmorrhoids.

Dr. Thomas J. Moore, of Richmond, Va., cited two cases—one of operating for fissure as a result of piles, and the other to relieve pain while removing some stitches. In neither case did the cocaine application do any good.

Dr. Alex. Harris, of Jeffersonton, Va., has used it with great satisfaction in cases of conjunctivitis. It acts both as an astringent and anæsthetic.

Dr. Samuel B. Morrison, of Rockbridge Baths, Va., has used it to irrigate the bowels, but had derived no effect. He agrees with Dr. Moore.

Dr. Hugh M. Taylor has used it preparatory for operation for vesico-vagina fistula, and also for lacerated perineum, etc., and was pleased with the effect.

Dr. J. F. Winn, of Richmond, Va., had used cocaine as a satisfactory anæsthetic in removing piles.

Dr. Hammond said that the drug is something new, and we have not yet learned all of its uses nor its abuses. Even the early history of Peruvian bark showed that its uses were not properly understood, and even deaths were then attributed to it, which we now know were not due to cinchona. He does not wish to be understood as saying that there is no such thing as the cocaine habit, but he does say that the habit is very much like that of the coffee habit. All of us feel that we have power left us of discontinuing its use if we choose to will to discontinue its use. This is not the feeling of a whiskey-drinker or an opium-eater. When such an one wishes to discontinue the whiskey or the opium, he finds himself almost powerless to put forth the necessary will force. In the case reported by Dr. Taylor, it should be taken into consideration that his doctor had advised him to take the cocaine, that the cocaine gave relief, and it may have been a determination to have the cocaine rather than to suffer the pain he was having. It was a case of preference, and not a case of irresistible habit. Cocaine is undoubtedly an antidote or a good substitute for morphine habit; for the former can be broken, while the latter cannot be easily broken except by medical treatment. It seems to be established that cocaine does not act satisfactorily when *applied* to inflamed tissues, but it does act when injected near the inflamed part so as to be absorbed. But there are ex-

ceptions even to the statement that it does not act when applied to inflamed surfaces; for it does act well when applied to the inflamed surfaces of the eye and nose. Gen. Grant's case is too fresh in memory to have to repeat it here in illustration of its value when applied to inflamed tissues. In many of such surgical cases as have been referred to to-day, good would probably have resulted had a twenty-per-cent solution been used instead of a weaker preparation. He had recently given great relief to a lady while travelling on the cars, and who had gotten a cinder in her eye, which was causing inflammation, by pencilling the eye with the preparation he usually carried about with him. In three minutes her eye was painless, and no inflammation resulted. In the rare cases of injurious or threatening effects, to which allusions have been made, he would remind the gentlemen that other things act as peculiarly. For instance, Dr. J. B. St. John Roosa, the distinguished opthalmologist of New York, had had a case in which an unusually small quantity of atropia solution applied to the eye produced severe symptoms of belladonna poisoning. He had not tried in his paper to state anything like the list of diseases for which cocaine is useful. Hence he had not dwelt upon the value of the drug in mucous inflammations. In vaginismus, he has used something like a twenty-per-cent solution with invariable success. Among odd uses to which he had satisfactorily put cocaine was one of masturbation in the female —the habit being established in her by rubbing or scratching an itching vulva. He simply kept the parts wet with a solution of cocaine, and she was relieved of both the pudendal irritation and the masturbatory habit. In the same way, keeping the prepuce wet with cocaine solution, will often cure masturbation in the male. As to rectal diseases, he has no experience with cocaine. He said that Dr. Milton Josiah Roberts was in the habit of using a twenty-four-per-cent solution, and thinks very highly of it. He is surprised at Dr. Wm. L. Robinson's statement that he had derived so little benefit from cocaine in his case of hay asthma. So far as he knows, it is about the only case on record in which it did not do great good in that disease. So generally valuable is it in that disease that the Hay Fever Association has adopted it as their remedy.

Dr. Charles M. Shields, of Richmond, Va., said that he uses a strong solution of cocaine in cauterizing and in like operations upon the mucous membrane of the nose, and yet has had no disagreeable effect from his daily use of it. He

combines it almost invariably with atropia, and this combination acts well.

Dr. Chas. M. Shields, of Richmond, Va., in presenting his report on

Advances in Ophthalmology, Otology and Laryngology,

First called attention to the number of contributions during the past year on the subject of glaucoma. Masselon's advocacy of a posterior or equatorial sclerotomy as a substitute for iredectomy, together with a description of this method of operating and its results, were mentioned. Galezowski makes the incision between the superior and external recti-muscles, and reports sixteen cases with good results. He cited the favorable reports of Anuaignac, Panas and others on cures of glaucoma, with eserine and pilocarpine as indicative of a conservative tendency in the treatment of the disease.

After giving a *resumé* of Prof. Förster's arguments in favor of a full correction of myopia instead of the partial one usually advocated, the Reporter took up the *galvano-cautery* in the treatment of diseases of the eye, alluding to its employment in crescentic ulcerations, pannus, follicular infiltration of the conjunctiva and granular lids.

The too large mortality following enucleation was discussed, and thorough drainage of the orbit with strict antiseptic precautions urged. Dr. Shields, alluding to a paper presented by himself at the previous meeting of the Society, on the "Absorption of Corneal Opacities by Massage," again expressed his confidence in its hastening very markedly the disappearance of corneal spots, and also mentioned Dantziger's report of successful cases. He also reported successful experience from freely douching the lachrymal sac and duct by means of a fountain syringe, connected with a perforated probe, in catarrhal conditions of the part.

Under the head of *Otology*, attention was called to Maloney's otophone, and to an article by Dr. McBride, of Scotland, on the "Prognosis of Chronic Non-Suppurative Middle Ear Affections," dwelling on the fact that we were too prone to class all such cases together, and in some instances, fail to make an effort for the restoration of hearing, when such a result was possible. He cited several recent cases of his own, where unexpectedly good results were obtained when appearances suggested. an unfavorable prognosis. *Laryngology* was represented by analyses of papers on the treatment of ozæna by animal grafting, and on hay fever,

Dr. Shields adding his own to the favorable reports of its treatment by the galvano-cautery.

Battey's Operation—Its Objects, Results, etc.

Honorary Fellow Dr. Robert Battey, of Rome, Ga., by invitation, made some general remarks on Battey's Operation. He commenced by referring to his visit to this Society when it last met in Richmond, in 1878. He tried to establish then what he believed to be true as to the radical measures then proposed and satisfactorily acted on in regard to the importance of effecting the change of life in certain cases of ovarian neuroses. This Society took him by the hand in the hour when friendship was his support. With the help he here received in the way of recognition of his claim and the value of his operation, added to like helps from his own State Association, he feels that he has established the truth of his teachings at that day, and he comes to make his acknowledgments to this Society, and to say that the battle is now over. He has settled down at his home, trying to do all the good he can, without seeking for distinction. He had wished to have the privilege of demonstrating clinically his operation before this body. But notwithstanding the earnest efforts of the Secretary to find a suitable case for such a demonstration from within the limits of this State, he has not been able to secure one. This failure, however, is not altogether unexpected. It illustrates an important point in all his claims on the subject, that proper cases for Battey's operation are comparatively few in number. The nature of the operation itself is such as to make this as it should be. The operation is liable to great abuses. He wants operations, purporting to be his operations, watched with jealous caution. The profession of Virginia fully realize the importance of this as attested by the rarity of the operation in this State. Several years ago, a young lady, ruined in health by ovarian disease (one of the ovaries was as large as a walnut and cystic), as in a measure shown by the want of recurrence of menses for twelve months, etc., was sent to him to have her ovaries removed. He told the father that he must first resort to medical measures before deciding to operate. He placed her in his Infirmary so as to keep her under observation and treatment, but she improved very slowly, although she remained fourteen months. One ovary had become very large and tender, and her health was not restored. He then advised that one or both of the ovaries should be removed; but the patient herself now determined

to hold out longer against an operation, and in twelve months she was married. In due course of time she had two children, and her health greatly improved without the surgeon's knife. True she is not well, and never will be; but she can get on very well as she is, and she is, therefore, not a fit subject for the operation. Let this case be a lesson to any one proposing to do a "Battey operation" on first introduction of a case that may come to him for relief. The English say we must have many physical signs and symptoms of grave ovarian disease before undertaking the operation. Organic disease of the ovary is by no means always the safest test as to the demand for the operation. Some cases of organic ovarian disease are not fit subjects for it.

How, then, can we determine on the proper indications? The question is often asked him, if he operates for fibroids, for nymphomania, for oöphoranæmia, etc.? His answer is both Yes and No. He related the case of a weak and miserably afflicted woman, who had gone through all the measures that had been proposed for her relief except that of "Battey's operation," and was generally regarded as incurable. Her condition was due to menstrual derangements that could not be relieved by medical treatment, and he has no doubt but that his operation would have cured. He took this position in 1872 that in all such cases the bringing on of "the change of life" would be curative. The principles upon which his operation are as well founded as a granite rock, have been satisfactorily tested to confirm his original views. He always "selects" his cases for the operation from among the great number of patients sent to him from all parts of the country as presumably suitable for it. In determining whether a case is suitable or not, there is no better rule than this: Ask the attending physician, in whose experience you can rely, if he has exhausted all other reasonable means of relief, and if "the change of life" would cure? And even after this, so far as his practice is concerned, he keeps the patient under observation himself for awhile before positively determining to do the operation, if there be a shadow of a doubt as to the propriety of the same. He formerly was often asked why he did not give assafœtida, etc., for the disorders which are now known to be those making the operation justifiable. At that time people did not seem to take into consideration the magnitude of the proposition. The primary object of the operation is to bring about "change of life." Why? Because in oöphoritis—the most common condition requiring the

operation—the gravity of the symptoms is due to the processes of ovulation and menstruation; and it is to discontinue the activity of these functions that the operation is to be done. If the ovaries be removed, there are no ovaries left to keep up the excitement, which is not only the cause of the trouble, but the disease itself. In cases of orchitis, the patient may get well, and almost invariably does, without even the thought of castration. But note the difference: there is no monthly molimen in men. But in women the irritation of the ovaries scarcely passes off before return of the menstrual excitement, which renews the congestion, and sooner or later serious organic disease results. Then, soon no remedy is available except removal of the offending ovary. In sclerosis of the ovary we have chronic oöphoritis, aggravated by monthly thickening of the membrane. The ovarian stroma is destroyed, and atrophy of the gland ensues. Then ovulation is attended with great pain; the ovule is hard to come away, and congestive ovarian dysmenorrhœa results. If tubal disease comes on, and becomes of sufficient gravity, causing such as salpingitis or pyo-salpingitis, take out the tube also when called to operate. In Emmet's cases of cellulitis the disease would not have been so formidable if the ovaries had been taken out. But gravely diseased tubes must be taken out. As for results of Battey's operations, as is generally the case when something new is announced to the profession, too much was expected, and far more than the author promised. But every promise he made to the profession or to the patient has been realized. A long time must elapse between the operation and the recovery. The cause, it is true, has been removed, but the impressions made upon the nervous system by the diseased organs will last for a time, and then gradually wear off. Hence, the surgeon must be very guarded in his promises as to immediate cure, or as to very marked beneficial effects at once. "The change of life" brought on by art affects the system as much as that which comes on as the result of nature. The patient will for a time have her ups and downs; but she gradually improves, just as she was getting from bad to worse before the offending ovaries were removed. He repeats that it is the "change of life" that is sought to be effected by "Battey's operation."

Dr. Joseph Taber Johnson, of Washington, D. C., remarked, in response to invitation from the President, that Dr. Battey had left very little to be said. "Battey's operation" has won the victory over early opposition, and is now

so recognized the world over. He joins Dr. Battey in discountenancing the groundless resorts to the operation. But there are very many cases in which nothing else will do. Let there be even three or four years of medical treatment before deciding to do the operation. Some wealthy patients might afford to be under treatment even longer; but most women could not wait so long. Something must be done to make them capable to earn their daily bread. In such cases, we should not wait beyond the time necessary for an ordinarily fair test. It is due to the needy that they should have the benefits of the operation as soon as practicable. Dr. Battey's tables show only two deaths out of 102 operations. Dr. Wylie has operated 60 times without a death. Tait has a record of about 300 cases with only two deaths. Thus the operation is not without danger, but late advances in abdominal surgery have reduced the danger to the minimum.

Dr. William A. Hammond said he had been struck with the remarkable self-restraint of Dr. Battey in speaking of his own operation—so unlike most authors of self devised measures which they had found to be of great advantage in practice. It was natural that he should have so extolled the benefits of the procedure as to lead to abuse; but he does no such thing. Limits are well defined by him as to the scope of usefulness of the operation. Dr. Hammond has seen hysteria, hystero-epilepsy, terrible convulsions, hallucinations, acute mania, etc., that were stopped by prolonged, firm, but gentle pressure over the ovary—notably the left one. He is not the originator of the plan, but the credit is due to Charcot. He wishes to inquire if "Battey's operation" is admissible here. The ovary does not seem to be tender in all these cases. The application of a truss has often kept up the good effect first obtained by the pressure. Is there any guide to tell whether the maniacal or the hystero-epileptic patient requires the excision of the ovaries when there is no very great degree of pain referable to those organs? On two occasions, Dr. Marion Sims saw patients with him. One seemed to be of ovarian origin. Dr. Sims operated as the result of concurrence in the consultation, but the operation did not cure. In the other case, no disease of the ovary was found upon examining the ovary after its removal, and yet recovery resulted. What he wants to know is, can we tell when to operate in epileptic cases?

Dr. I. H. White, of Richmond, Va., asked Dr. Battey what

was the most common lesion, in his experience, that called for the operation?

Dr. Battey, in response first to Dr. Hammond, said he had discarded the term hystero-epilepsy, and has substituted oöphoro-epilepsy. The nervous disturbances do not arise from the womb, but from the ovaries. His operations for pure epilepsy have been very few, and the results have not been very encouraging. But those cases where he could distinctly trace connection between ovulation and the ovaries, as diseased organs, were those in which he had found benefit. The ovaries must be the starting point of the trouble. He has learned to be very careful in making his selection of cases in such complaints. He is frequently asked to operate in cases of this kind, but it is only about once in four times that he consents to do so—only after he has become fully satisfied that the ovaries are the starting point of the trouble. The taking away of one ovary will not do. In cases of mania, his success has not been gratifying. In reply to Dr. White's question, he would say that sclerosis and cystic degeneration had been the most frequent lesions.

Dr. Joseph A. White, of Richmond, Va., read a paper on

Sore Throat and Accompanying Nasal Troubles.

The first pages are devoted mostly to the causes and pathology of these common affections. As to treatment of sore throat of catarrhal origin. if there is fever in the part, he gives drop doses of tincture of aconite root every hour until fever abates. It is diaphoretic, diuretic, and antipyretic. Largely diluted with glycerin, it is also a good local application to the pharynx, relieving pain; but it requires care. Guaiacum, however, is the best local application. Three-grain lozenges every three hours relieves capillary engorgement, and in the arthritic diathesis, acts constitutionally. It is almost a specific in tonsillitis. He gave many other valuable therapeutic hints of service coming out of his vast experience as a specialist in the line of eye, ear, nasal and throat practice. Incidentally, as bearing on the remarks made this morning on the subject of cocaine, etc., he said that a 30 per cent. solution was required for laryngeal operations.

During the *Afternoon Session*, Dr. J. S. Conrad, of Matley Hill Sanitarium, St. Denis, Md., read a paper on

Moral Insanity.

It is the most difficult of all forms of insanity to diagnose or define in proper terms so as not to be open to criticism, because the definition line between "moral insanity" and

"moral depravity" is so indistinct in many places as scarcely to be made out. "Moral insanity" means a form of insanity characterized by immoral acts—without perceptible or appreciable intellectual aberration. It displays itself in all the channels of life—erotomania, kleptomania, pyromania, etc. To decide the question of insanity from depravity, it is necessary to study each individual case by itself.

Dr. William C. Dabney, of University of Virginia, pressnted a paper by title on "*Atypical Forms of Typhoid Fever,*" which was referred to the Publishing Committee. (This being afterwards selected as the subject for general discussion during the session next year in Norfolk, and Dr. Dabney being the appointed Leader, the paper was withdrawn by the author.)

Dr. William D. Hooper, of Liberty, Va., read the report of a case, which had occurred in his practice, of "*Gunshot Wound of the Brain, in which the Breech-Pin of a Gun Remained Imbedded in the Cerebral Substance for Three Months without Producing Constitutional Symptoms—Death on the* 101*st Day.*" The pin entered the skull at the root of the nose, passed through the frontal sinus, and entered the cranial cavity; it then broke through the skull and soft parts at a point one inch above, and on a line with the outer canthus of the right eye; then glanced to the back part of the brain, and destroyed the upper half of the right hemisphere.

Dr. R. B. Stover, of Richmond, Va., reported a case of "*Epilepsy Due to Stricture of the Urethra,*" which was relieved by operation.

Dr. L. H. Keller, of Luray, Va., reported a case of "*Multiple Sarcoma of the Skin.*" (The patient, as predicted in the paper, has died since the adjournment of the session.)

Dr. E. H. Magruder, of Charlottesville, Va., presented a paper by title, on "*Plea for Chemistry,*" which was referred to the Publishing Committee.

The social events of the session were a complimentary entertainment at the Theatre, and a banquet by the Medical College of Virginia, receptions by Drs Hunter McGuire, Joseph A White, and Charles M. Shields, and a banquet by the profession of the city.

"HAVE prescribed *Tongaline* frequently for cases of neuralgia and rheumatism, and have not been disappointed in a single instance."—P. A. CASHON, M. D., Martin, Tenn.

Correspondence.

The Proposed Amendments of the Law Regulating the Practice of Medicine and Surgery in Virginia.

Mr. Editor,—Medical Examining Boards have been organized in response to a sentiment calling for a reform in the matter of medical education. For many years this sentiment has found expression in addresses before the National and State medical societies and through the editorial and contributed columns of the medical press.

The expression of this sentiment, although uttered with no uncertain sound, and through every available channel, except to a very limited extent was passed unheeded by the American schools of medicine. It is true, for a time, some of them made a pretence of respecting public opinion in regard to this matter, and announced their purpose to lengthen their course of study and demand a higher degree of proficiency. A good number of the schools pledged themselves to this better policy, but the first year's trial resulted in a large loss of patronage, and, with few exceptions, they returned, in part or wholly, to their former methods.

What has been the consequence? It is an easy matter to obtain a medical degree; the wholesale manufacture of physicians has thriven to an extent which baffles competition, the standard of graduation is brought to a low plane, the profession is crowded, and our system of medical education has become a subject of reproach and regret.

What is the remedy for this unfortunate and mortifying state of affairs? The schools themselves will not co operate to bring about the needed reform. Denunciations through that greatest channel of medical thought, the medical press, have signally failed; and, in spite of the oft-expressed and positive public opinion, the evil still remains. There is but one remedy. That one is radical, and, if judiciously applied, *effective.* That remedy is the fulfilment of the highest possible ends of the State Boards of Medical Examiners.

That this method, or, in fact, any method of reform, should meet with opposition is but natural. Only to those needing reform is the injury done, and only those injured cry out

against it. Are not those who need reforming, by opposition, tearing down their own houses to throw stones at the reformers?

The law regulating the practice of medicine and surgery in Virginia seeks to divorce the teaching power from the licensing. The Board of Medical Examiners, operating under this law, becomes the licensing power of the State, and as that Board is not influenced by the size of the class, the number of graduates, and the direct and indirect profits incident thereto—as they derive no reward whatever save the consciousness of a conscientious discharge of duty—it is fair to assume that the power is vested in safe hands.

Its most enthusiastic supporters will not claim that this law is perfect. The patrons of the bill recognized, at the time of its passage, defects, which they could not then correct, and which they had to accept, rather than endanger the whole scheme. They appreciated the fact that it is easier to amend a law after its operation is seen.

The first, and we think by far the most important amendment proposed, is to repeal that feature of the law allowing applicants to appear before any three members of the Board. As there are three members in each Congressional district, it was thought that this provision would save applicants their traveling expenses. The utility of this feature of the law will not, we think, be held, when it is known that applicants travel all over the State, selecting one examiner here and another there, according to their estimate of his leniency. A case illustrating this point has recently come within our knowledge. A resident of Richmond stood before one of the Richmond examiners, slighted the other two, went to one part of the State and then another, presumably picking out supposed "easy examiners." Granting that the applicant's appearance before the Board in session entails some expense, it occurs but once in a lifetime and before he is settled as a practitioner. But there are still stronger reasons why this provision of the law should be repealed.

The private examination is not, as a rule, a thorough test of the applicant's qualifications. For example, an applicant comes to an examiner's office to be examined. The exami-

nation is not often written in less than two or three days, and by some applicants it has been strung out into weeks. Questions are written by the examiner and given to the applicant. The examiner has to attend to his practice, and, if a country practitioner, is often absent for hours, if not days; and the city practitioner can only drop in occasionally to see how the examination progresses. The applicant is thus left for hours surrounded by books, and every opportunity is given him to use his "compends," etc. Grant that it is ungenerous to suspect unfairness, in some instances this suggestion amounts to more than a suspicion. We claim that it is equally unfair and impolitic to place such great temptation in the way of the applicant. Our experience compels the conviction that certificates are issued to some who do not deserve them. The Board's permit, which should be a passport and guarantee of proficiency, becomes worthless.

A great injustice also is done those who pass on their merit, by classing them with incompetent applicants, the honesty of some of whom we have had cause to doubt.

It would seem that the high standard demanded by the Board in general session is not maintained by its members in their individual examinations. This is true, or else there is wholesale fraud practised by the applicants, and consequently a much higher degree of proficiency shown by their examination papers.

But, be the fault with the examiner or examinee, the fact remains that very few applicants are rejected by the private examiners. To show that the standard required by the individual examiners is lower than that required by the Board in session, it is only necessary to quote one fact from the Board's report. At the regular semi-annual meeting of the Board, in April, 1887, there were 19 applicants; of this number 12 were rejected. Between the April and October meetings 36 applicants went before the individual examiners, and of that number but 2 were rejected. Clearly there is a radical defect somewhere. That the advantage is in favor of the applicant who goes before the examiners in their individual capacity is a fact becoming well appreciated. At the Board's meeting in April there were 19 applicants; at

the meeting in October but 2, and one of them, after looking at the examination, said: "No, I will not stand that examination; I will wait and go before three examiners." Thirty-six had gone before the examiners between the April and October meetings. Only a few weeks before the recent meeting of the Board, residents of Richmond, who knew the Board would soon be in session, declined to wait, and finally admitted that one of their professors had advised them to go before the individual examiners.

Allow that provision of the law which permits examinations by the individual examiners to continue, and the inevitable consequence will be that the general meetings of the Board will be forsaken by applicants, the high plane upon which it has been sought to place the standing of the Board will not be reached, and the Examining Board will be one in name only and not in fact.

We would not have it inferred that the Board is seeking means by which to reject applicants. Only those who have had to exercise it can know the moral courage and stern sense of duty necessary to crush the hopes of a struggling young man; and yet we do affirm our unwillingness to sacrifice time for the work of this Board unless we can see the good resulting to the profession and public. In our judgment the Medical Society of Virginia has no higher trust at its disposal than the membership of the Virginia State Board of Medical Examiners. No power it can direct can do as much towards elevating the standard of medicine within our borders, and with a jealous eye should she watch and with a strong hand protect the Board's interests.

All of this responsible work should not devolve upon the members of the Board alone. It should be the sacred mission of every well-wisher of the profession to say that its highest possible end is attained.

It is thought by some that the Board is too large and that its membership should be reduced. If the Board was an expense to the profession or to the State, this conclusion might be advanced with some force; but as long as the members of the Board are patriotic enough to pay their own expenses, we think, on the ground of expense, the objection

does not hold good. And there are other reasons why a large Board is better than a small one. Wherever a member is located who grasps intelligently the true mission of the Board that member is in a position to correct erroneous impressions regarding the Board's mission. A small number of examiners cannot do the work as well. Suppose we have one representative from each Congressional district instead of three, we could then only have one representative on each section, viz., Chemistry, Anatomy, etc. Suppose there are twenty-five or thirty applicants before a session (and there will be as many if we do away with the private examination), then the one representative on each section will have twenty-five or thirty papers in his section to read and mark in a short time, and we find it no easy task for four members on each section to do this work expeditionsly and thoroughly.

If it is ever charged that partiality is shown to one or a class of applicants, the presence of a large number of disinterested examiners is better calculated to disarm such suspicions and refute such charges. Cliques cannot be so easily organized, if such a thing is possible. Narrowness of purpose and action are not as likely to occur, and opposition to the Board is less dangerous and less probable.

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Analyses, Selections, etc.

[Prepared by WM. S. GORDON, M. D , Richmond, Va]

Nux Vomica—Peculiar Action in Certain Individuals.

Dr. Chas. Chassaignac, of New Orleans, La., calls attention (*N. O. Med. and Surg. Jour.*, Oct. 1887) to the case of a lady, aged forty, who sought advice for a mild attack of malaria without marked paroxysms, but with some nervous depression. A tonic and antiperiodic, each dose containing one-fourth of a grain of extract of nux vomica, was given. An hour after taking the second dose, she was much agitated, had lightness of head, and lost the full control of the lower limbs, which were "jerky." Full doses of bromide were given, recovery taking place in a few hours. The nux vomica was discontinued. Second Case—a young married

woman, pulled down by fatigue and grief, was given one teaspoonful thrice daily of Parke, Davis & Co's., "hæmatic syrup," each ounce of which contains one-sixteenth of a grain of strychnia. The second day afterwards she became delirious, talked incessantly and complained of lightness and emptiness of the head. Slight opisthotonos, with severe spasm of the muscles of the neck, arms and legs, existed. In the intervals there were tremulousness and numbness of extremities, with a small and frequent pulse and a hurried and jerky respiration. No over-dose had been taken, the symptoms being produced by less than one-thirty-second of a grain of strychnia in divided doses. Potassium bromide and chloral every hour in full doses relieved the severe symptoms in six or seven hours. Slight muscular twitchings, with numbness and soreness of extremities, continued the next day. Imagination played no part in these effects, and the writer states that such experiences should make us cautious in the use of the drug.

Compound Fracture of Tibia.

A case occurring in the service of Dr. Chas. Chassaignac, and reported (*N. O. Med. and Surg. Jour.*, Oct. 1887,) by Mr. George Sabatier, Resident Student in Charity Hospital. Left tibia fractured by the kick of a horse, May the twenty-second; wound, two-and-a-half inches in length, on inner surface of middle third of the leg, extending upward and inward from crest. At this point the bone was obliquely broken upward and outward, with one-and-a-quarter inch of lower end of upper fragment denuded. Dr. Parham treated the case. Fragments were brought into apposition, the periosteum drawn over the denuded bone, and the upper and lower margins of the membrane joined with catgut. Bichloride solution ($\frac{1}{2000}$), and iodoform were used on the wound, and drainage secured by catgut strings, soaked in bichloride and placed in the bottom of the wound, the ends protruding. The wound was closed with deep catgut sutures, and a sponge dipped in bichloride put over it; above this, antiseptic cotton; and lastly, gutta percha tissue. The leg was placed in a Bavarian splint. Next evening the temperature was 102°. Saline laxative and cinchonidia sulphate were given; fever abated in a day or two. In fifteen days the temperature fluctuated between 99 and $98\frac{3}{5}$°. A foul odor was detected June 4th; general condition good; but the bandage was removed. The sponge was found putrefied, and sutures were gone. A

linear cicatrix one inch long was seen, from which a new fleshy growth protruded. This was cauterized with nitrate of silver, iodoform used, and leg replaced in splint. Patient discharged, cured on the twenty-fifth of July.

Acute Circumscribed Œdema.

In a paper read before the Orleans Parish Medical Society, by Dr. Rudolph Matas, (*N. O. Med. and Surg. Jour.*, Oct. 1887), he reports the case of a woman, aged thirty-six, of good general health, but having the malarial "tropic diathesis," complained of a large, painless, doughy-feeling swelling affecting the upper lip. It came on gradually every day between 8 and 11 A. M., reached its height about noon, and disappeared late in the afternoon. No chill was present, and no lesion in the mouth. The bodily organs and the urine were examined, but all efforts failed to discover a cause. On seeing the patient the next morning before 12 o'clock, the writer verified her statement. Twenty grains of quinine were given in the evening and ten early the next morning. Two days afterward the patient said the tumor had not returned, but was told that it might do so. Quinine and arsenic were given thrice daily. The next day there was a mild recurrence, and after twenty grains additional of quinine in the evening there was no return. The writer quotes from various quarters to show that the nature and etiology of the disease are not settled. Heredity seems to have some influence. The differential diagnosis is obtained by elimination.

Gunshot Wound in Scarpa's Triangle.

The case was reported with comments by Dr. Parham, (*N. O. Med. and Surg. Jour.*, Oct. 1887,) by Mr. Robert Berde, Resident Student in Charity Hopital. The ball from a forty-four calibre pistol produced a wound, August 13th, in the line of the femoral vessels, near the apex of the triangle. Free hæmorrhage was stopped by a compress over the femoral. On removing this at the hospital, no hæmorrhage followed, pulsation existing in both tibials. Light dressing applied. The next day a diffuse aneurism was found in the triangle. Dr. Miles explored, finding artery and vein injured, and ligated artery on both sides of wound; vein not disturbed. Skin was sutured. The next day erysipelas set in, for which liquor plumb. subacetat. dil. was applied, and quinine and iron given. On August 16th, the erysipelas had spread, the temperature reaching 106°, and

the pulse being frequent and weak. Sixty grains of antipyrin and twenty drops of tincture of digitalis were given in two doses, temperature was reduced next day to 101°; sutures removed, and wound washed with bichloride solution. August 21st, a drainage tube was inserted on inner side of thigh three inches above knee, and pus came more freely. August 23rd, patient had a recurrence of hæmorrhage, losing a pint of blood. Femoral artery was found the source. Ligature successfully applied. August 25th, erysipelas disappeared, and tonic treatment was begun. August 28th, another hæmorrhage; ligature was put on artery and vein by Dr. Parham, and the patient improved, the circulation continuing good. August 31st, violent coughing set in, accompanied with profuse hæmorrhage. Artery found all right, but the bleeding vein was tied at another point. Hæmorrhage was controlled, but death occurred several hours later. Autopsy showed that the ball had taken an oblique upward course, consequently wounding a greater length of vessel, and lodging against the upper part of acetabulum. Continued sloughing prevented successful ligature; and the loss of blood, with profound septicæmia, led to the fatal result.

Gunshot Wound of Axilla.

Mr. Robert Borde, R. S., reports (*N. O. Med. and Surg. Jour.*, Oct., 1887,) the case of a young man shot while resting on the barrel of his gun. The whole load of eleven buckshot entered the axilla, passed through shoulder joint, and made its exit to the outer side of the acromion. Dr. Miles found the joint exposed and humerus comminuted. The vessels seemed uninjured. An incision of three inches was made along the outer side of head of humerus, and one inch of the shaft excised. Little hæmorrhage followed; drainage was good, and suppuration free. Eleven days afterwards hæmorrhage occurred, but had ceased when the bandage was removed. On inserting the drainage tube again blood flowed. The wound was enlarged, but as the bleeding vessel was not found, Dr. Miles made an incision along the lower border of the clavicle, and continued it to the border of the incision previously made. Several pieces of bone, paper and gun-wadding were removed. Only after cutting the attachment of the pectoralis minor could the axillary be tied. The bleeding vessel was not found. The wound was sutured with silver wire and a drainage tube inserted. Pulse was rapid and weak. Twenty minims of

tincture of digitalis and one-fourth a grain of morphia were given hypodermically, the digitalis being repeated every three hours by mouth. From this time the case progressed well. It is probable that a useful arm will result.

Large Uric Acid Calculus.

Dr. F. W. Parham, of New Orleans, La., calls attention (*N. O. Med. and Surg. Jour.*, Oct. 1887,) to a man brought to the Charity Hospital with uræmic intoxication, the respiration being frequent and noisy, and the patient in a stupor, from which he could be aroused only to semi-consciousness. General œdema and ascites were present, but no signs of heart trouble. Sounding revealed stone. No operation could be done; and after death permission was obtained to examine only the bladder. The vesical walls were thin, and a large, rough, oval, hard stone, the size of a hen's egg, was found lying transversely across the mouth of the urethra. It weighed two and three-quarter ounces, and was of uric acid, laminated. No previous history was obtainable.

Atresia of Vagina.

A case reported by L. J. Lebeuf, of Houma, La. (*N. O. Med. and Surg. Jour.*, Oct., 1887). Patient was seen with Dr. F. A. Sylvestre. She was a negro girl, aged 18, who had reached puberty two years before, but had never menstruated. She complained of headache, amblyopia, and dorsal pain during the catamenia. Had lately felt weight in epigastrium, and severe lumbar pain. Urine had diminished until only half an ounce at a time was passed, but this frequently. Attempted coition had proved unsuccessful. Pressure on abdomen gave little pain; in lower part fluctuation was pronounced; vaginal opening completely occluded. A red, soft, fluctuating, rugated tumor, looking like a distended bladder, protruded. No lessening in size of the tumor was produced by drawing off the urine from the bladder. A small trochar was introduced, from which oozed some drops of thick black blood. An incision was made the next day, and over three pints of offensive blood and mucus flowed out, the discharge continuing for a week. The womb was of normal size. No fever resulted; the pain ceased, and the patient was allowed to get up. The writer wonders that rupture was not produced, and that the fluid was not forced back through the fallopian tubes into the peritoneal cavity.

Lupus Vulgaris.

A clinical lecture by Dr. Henry J. Reynolds, of the Chicago Polyclinic (*N. O. Med. and Surg. Jour.*, Oct., 1887). After discussing the characteristics of the disease, and of the peculiar feature of the case before him, the following diagnostic table is given:

Lupus Vulgaris.	Syphilis.
Almost invariably first seen in childhood.	Usually in adults.
Not hereditary.	May be.
Never occurs in Infancy.	It may.
Rare in this country.	More common.
Papules small, soft, deep, not elevated, and may reappear in scar.	Larger, harder, elevated, and never reappears in scar.
If female, not necessarily previous history of abortion.	If female, may have such history.
Generally local.	Tends to be general.
Progress very slow.	More rapid.
Margin ill-defined and uneven.	Well defined.
Never affects bone.	It may.
No syphilitic history.	Almost always history of primary or secondary history in adults.
The Ulcer.	
Generally begins from an aggregation of points or papules.	Generally from single point.
Is shallow, with red, granulated base.	Deep.
Margin not abrupt, elevated, or undermined.	Margin abrupt, elevated and undermined.
Secretions scanty.	More profuse.
Odorless.	Fetid.
Little crusting.	More crusting.
Resulting scar always white.	Often pigmented.

Lupus Vulgaris.	Superficial Epithelioma.
Usually begins in childhood.	Usually in old age.
Starts as multiple discrete papules, which may each form an ulcer.	Starts from one or a collection of papules, ultimately forming only one ulcer.
Not painful.	More or less so.
Progress very slow.	More rapid.
Becomes irregularly nodular.	Does not become nodular.
Becomes diffuse and ill-defined.	Does not become diffuse, and is well defined.
The Ulcer.	
Usually multiple.	Usually single.
Shallow, with red granulating base, bleeding easily.	Deep, with hard, uneven base.
Edges ill-defined, not elevated, everted or undermined.	Edges clean cut, abrupt, hard, and everted.
Ill-defined, red, unhealthy skin around ulcer.	Surrounded by healthy skin.
Moderate secretion.	More scanty; perhaps with blood.
Secretions odorless.	Fetid.
Typical non-ulcerative papules in scar, and healthy skin.	No elementary papules found at same time as ulcer.

Lupus erythematosus is told from lupus vulgaris by the absence of deep-seated papules; by ulceration and discharge in former; appearance first in adults; symmetrical on each side of face; firmly adherent yellow scales; and absence of the nodular character of lupus vulgaris. In benign cases, simple treatment of lupus vulgaris with green soap, stimulating lotions, caustics, etc., may suffice. The more effectual measure is a number of parallel cuts just deep enough to reach healthy tissue, these being crossed by similar cuts. In this case, owing to advanced disease, scraping with the dermal curette was used, and nitrate of silver applied to the curetted surface. Then the following:

℞. Iodoform.....
Pyrogallic acid.....aa ʒj
Ung. aq. rosæ.....ʒj—Mix.

Terebene.

Dr. Willard H. Morse, of Westfield, N. J., speaks (*N. O. Med and Surg. Jour.*, Oct., 1887) of the use of this drug in the service of Professor Germain Sée, in the Salle Saint Jeanne, Hotel Dieu, Paris. Terebene was discovered and commended by the French. Prof. Sée says of the drug: "Where the diagnosis is emphysema, it is the first of the agents employed. Where it is peri-uterine phlegmon, its use immediately follows injections. Where it is of albuminuria, it is always recognized as a worthy remedy." In England, Dr. Wm. Murrell has used the drug with good results in 81 out of 94 cases of cough—"the consequences of irritation of the different branches of the pneumogastric nerve, the short jerk of cardiac irritation, the heavy bark of bronchial dryness, the tiresome effort of gastric disturbance, and the slow dullness of sound that tells of hepatic congestion." In some cases Dr. M. attributed bronchial irritation to an inferior article. In acid dyspepsia, with stomach cough, success has been uniform. Terebene is used by inhalation, or internally. Five drops every four hours, on sugar, is given; the dose being gradually increased to twenty drops. Or the following:

℞. Terebene.....one part
Glycerine, spt. vini rect., syr. simp...āā fifteen parts
Ft. Mist. . Dose, a dessertspoonful.

Alone, or with other expectorants, terebene is indicated when the sputa are tenacious. In pneumonia with depression, it is well to combine it with ammonium chloride. In the cough of phthisis; in emphysema, hay fever, pulmonary

sclerosis, and in affections of the respiratory tract in general, the drug is serviceable. Hydro-nephrosis, pyo-nephrosis, vesical irritability. dropsy, chronic intestinal catarrh, irritative and flatulent dyspepsia—are indications for the use of terebene. The drug of American extraction is said by the wtiter to be better than the European.

Anæsthetization During Sleep

A case occurring in the service of Dr. F. W. Parham, is reported (*N. O. Med. and Surg. Jour.*, Oct., 1887,) by Mr. Wray, Resident Student, to prove that chloroform can be administered, if carefully done, during sleep, and that the withdrawal of a small portion of fluid from the pleural cavity favors the absorption of the rest. The patient, aged six, had the usual symptoms of pleuritic effusion. The difficulty of breathing called for aspiration. Dr. Parham and Mr. DeGrange succeeding in chloroforming the patient, and the Dieulafoy aspirator was used without pain. Only twenty-four ounces of fluid were drawn. On two succeeding occasions, the effort to anæsthetize under the same circumstances failed, owing to the lighter sleeping of the child. The patient, however, never referred to any of the attempts to chloroform him. A good recovery resulted, nothing remaining except slightly impaired resonance over the base of the left lung.

Tetanus.

Dr. J. McF. Gaston, of Atlanta, Ga., (*South. Med. Rec.*, Oct., 1887), in his remarks at the International Medical Congress, said that the microbic origin of tetanus is by no means proved. The disease may occur within a few hours after an injury, or may result from the cicatrization of wounds in which there is no chance for the microbe to penetrate the tissues, while cases ensue from certain agents taken by the mouth. The occurrence of tetanus as an epidemic in animals, or its extension from animals to man, under atmospheric conditions predisposing to the disease, is not a proof of the germ causation. The data for a correct understanding of the disease are wanting. The origin of the disease is usually a lesion of the remote branches of the nerves of the extremities, at which points injuries fester without forming pus, and lead to the trouble. It is not improbable that "septic infection may occur from degeneration of the cellular elements by absorption of the decomposed and disintegrated structure of a circumscribed area, which has

been injured." Punctured and lacerated wounds are frequently the source of tetanus, but incised wounds do not cause it. A mooted point is, whether tetanus ever occurs independent of a local lesion of the peripheral fibrillæ of the nerves in some portion of the body. Most of the idiopathic cases are referable either to an unrecognized wound, or to undiscoverable internal lesions. Considering all the manifestations of the disease, it is doubtful whether a specific germ has any share in the causation. As to treatment, a liberal use of chloral and bromide of potash seems to offer at present the most encouragement.

Quinine—When and How to Give It.

Dr. L. B. Banchelle, of Thomasville, Ga., in speaking of the applicability of the drug, states (*South. Med. Rec.*, Oct., 1887) that it is as efficient in typhus and typhoid, as in other diseases, combined with whatever other remedies may be required. It combines well with bismuth in intestinal, and with opium in brain complications. With rare exceptions it ought to be given only in the forenoon, because all fevers ebb from 3 o'clock A. M. until 12 M. Being a nerve excitant, its effect should wear off before the time comes on for sleep. Twenty grains at one dose, in extreme cases, are sufficient—so far as heroic doses are concerned; and the drug may be repeated in two hours. Only three doses a day are required, as a rule. It is rarely indicated in any class of neuralgias, but is good for rheumatism. *Per se*, it is no specific for any disease. Were the drug impossible to get, antipyrin, antifebrin, and perhaps ipecac, would be the best substitutes.

Prolonged Gestation Followed by Retained Placenta.

Dr. Charles P. McNabb, of Knoxville, Tenn., calls attention (*South. Prac.*, Oct., 1887) to the case of a lady, aged twenty-nine, and the mother of five children, who was found, one and a half hours after the birth of her last child, suffering with severe expulsive pains at short intervals. These had been present since her delivery. It was suspected that the womb contained another child in mal-position, but a vaginal examination revealed a retained placenta, the cord being full and warm. When the finger was passed gently around the edge of the placental mass, partial separation and considerable hæmorrhage followed. Traction and external pressure failed. Two drachms of Squibb's fluid extract of ergot were given, the hand passed into the womb,

and the remaining portion detached as rapidly as possible. In doing this the finger encountered a number of firm, disseminated bands of attachment, feeling like the touch of a serous membrane previously inflamed and healed. The bands were tough, thin, narrow, about one inch long, constricted in the middle to one-eighth of an inch, and about as thick as note paper. Each one was broken with the finger, the rupture taking place every time at the placental extremity, leaving a small plug of tissue attached by the bands to the uterine wall. In reviewing the case, it was known that the last menses appeared June 10th, 1886. March 1st febrile symptoms came on, with nausea, vomiting, severe pain in the back and limbs, followed in a few hours by pains like those of labor, and great soreness over the womb. The diagnosis was inflammation involving the placental site, and the fear was expressed that serious adhesions would result. There was no tenderness of the abdominal walls, nor trouble in the bowels; but pressure over the fundus uteri caused great pain. The constitutional symptoms were not grave enough for uterine phlebitis, and there were no signs of syphilis. In six pregnancies the patient had miscarried only once, and the inflammation was attributed to rheumatism. The question arises, Did the adhesions prolong gestation? In this event, Sir John Simpson's theory may be strengthened, "that labor is caused by a normal disintegration and detachment of the decidua serotina at or about the ninth month of gestation." In this case, delivery was accomplished June 5th, 1887. A good deal of blood was lost while completing it, and fears were entertained about the recovery of the patient. Plenty of nourishing food was given, and the following mixture, which Lawson Tait recommended for subinvolution:

℞. Fld. ext. ergot..... .....ʒij
Potass. bromide.....ʒj½
Aquæ aurant flor.....℥vj

M. S.: One drachm every six hours, or oftener, if necessary.

No further loss of blood occurred, and involution took place at the usual time. It is a question whether the retained *debris* has been absorbed, or remains to invite polypoid growths; but the condition of the patient suggests a complete cure. The writer speaks highly of the formula given above, and has used it without a failure where subinvolution existed from other causes than uterine tumors, and where, from surrounding circumstances, tardy involution was anticipated.

Some Observations Upon Pelvic Cellulitis.

In an interesting article read by Dr. Virgil O. Hardon, of Atlanta, before the Medical Association of Georgia (*Atlanta Med. and Surg. Jour.*, Oct., 1887), illustrative cases are given. He claims originality for his method of relieving by aspiration the *first* stages of those cases of pelvic cellulitis which, if let alone, would result in solidification. Emmet's use of hot water is sanctioned, but there are cases in which this measure does not give relief. With regard to aspirating when the effusion has taken place into the broad ligament on one or both sides of the cervix, care must be taken not to wound the uterine artery. "If deep pressure be made, the pulsation of this artery may be usually detected by the finger, and thus the danger of its injury may be avoided. The punctures may safely be made to the depth of half an inch or more, since the peritoneum is pressed upwards towards the abdominal cavity as much as the mucous membrane is pressed downward into the vagina; and hence the thickness of the cellular tissue at the point of infiltration is much greater than in its normal condition." The following conclusions are reached: 1. Acute pelvic cellulitis in the stage of infiltration may frequently be aborted by aspiration. 2. Chronic pelvic cellulitis rarely, if ever, exists except as a sequence of a previous acute pelvic cellulitis. 3. Hardness and tenderness in the broad ligaments, as a result of pelvic venous engorgement, are commonly mistaken for chronic pelvic cellulitis. 4. The treatment of such engorgement by raising the womb in the pelvis, relieves the constitutional as well as the local symptoms, and places the patient in a suitable condition for a radical operation more speedily than the methods of treatment commonly in vogue.

Status of the Yellow Fever Inoculation.

Dr. J. McF. Gaston, of Atlanta, Ga. (*Atlanta Med. and Surg. Jour.*, Oct., 1887), after speaking, by invitation, of the paper on "Vaccination Against Yellow Fever," by Dr. Domingos Freire, of Rio de Janeiro, offered the following before the section on Hygiene of the Medical Congress: Whereas, inoculation against yellow fever, if it proves successful after further examination, is calculated to benefit the human race throughout the world; and, whereas, the facts presented by the experiments of Dr. Domingos Freire afford a reasonable assurance of its protective influence; *Resolved*, That this section recommends the co-operative investigation of the results obtained by yellow fever inoculation as a protection against that disease, and that adequate appropriations by

the governments represented in this Congress be made for that purpose. *Resolved*, That this action be communicated forthwith for consideration in general session of the Congress.

This action was subsequently endorsed by a vote of the Congress, and is, therefore, the authoritative voice of the medical profession of the world.

Large Probes in Lachrymal Stenosis.

Dr. R. O. Cotter, of Macon, Ga. (*Atlanta Med. and Surg. Jour.*, Oct., 1887), having read an article by Dr. Theobold, of Baltimore, upon the use of large aluminium probes, adds his testimony to their value. He has used with success a No. 10 probe in a child of eight years, and in none of his cases has he been disappointed.

Reports from Eye, Ear and Throat Clinic of the Atlanta Medical College.

In the *Atlanta Medical and Surgical Journal*, Oct., 1887. Case 1. Patient, aged four years, had a slight abrasion on the left lid, with much swelling of the lids and profuse suppuration. The general appearance was of purulent ophthalmia, but a splinter, three-fourths of an inch long, was found imbedded in the cellular tissue, between the ball and the walls of the orbit. After the removal, cold water was used frequently and atropia drops (one grain to the ounce) three or four times a day. Recovery took place in a few weeks. Case 2. Patient struck in the left eye while cutting pine. A small body was found in the centre of cornea. In removing such bodies, steadying of the cornea is important. This may be done with the ring in a key, or the handle of a pair of scissors, the lids being kept open. Or we may hold the lids open with the thumb and index-finger of one hand, and use the scoop. Again, we may hold the lids open with the thumb and middle finger of one hand, stead the ball with index of same hand, and use the scoop with the other hand. If the patient can keep his eye still, the speculum alone may answer. Case 3. A chalazion involving several meibomian glands was cut into on the conjunotival surface, and pressure made to squeeze out the contents. Cold water was used afterwards, and the following at night: Yellow oxide of mercury, one-half a grain; petroleum ointment, one drachm. A good recovery followed.

Man an Object of Zoology.

Dr. S. W. Stiles, of Georgia, continues in the *Southern Medical Record* (Oct., 1887) his article upon this subject.

Book Notices.

A Handbook of General and Operative Gynæcology. Vol. I. By DR. A. HEGAR (University of Freiburg,) and DR. R. KATTENBACH (University of Giessen). In two volumes. This is also Vol. VI. of "*A Cyclopædia of Obstetrics and Gynæcology*" (12 vols., price, $16.50), issued monthly during 1887. William Wood & Company.

While we sometimes fear that the fast publications of numerous established authors may lead the general practitioner to attempt surgical treatment of womb derangements without sufficient cause, still for the sake of the large remaining class of patients who do require operations of one form or another this book will be serviceable in teaching the doctor how to do them *secundem artem.* Perhaps there is a little too much dependence upon mechanical measures in such a book as this for the "family physician;" but under the head of general measures many useful non-surgical directions are given. It is a regret that one of such real ability as Hegar should be still unwilling to yield to Battey the right of authorship of what is known and long will be known as "Battey's operation." It was Battey who first gave the operation to the world with a clear and distinct explanation of the theory and of the operation itself; and being original with him he is entitled to the authorship.

Diseases of the Female Urethra and Bladder. By F. WINCKEL, M. D., of the Royal University, Munich; and *Diseases of the Vagina*, by A. BREISKY, M. D., of the Royal University, Vienna. Edited by EGBERT H. GRANDIN, M. D., of New York. These two treatises constitute Vol. X. of "*A Cyclopædia of Obstetrics and Gynæcology*," (12 vols., price, $16.50), issued monthly during 1887. New York: William Wood & Company.

With this volume the publishers issue a card of explanation as to its appearance before the preceding serial volumes of the current annual "Cyclopædia." Some translations of the volumes have not been finished; but the publishers express the hope that the entire twelve volumes will be ready in October.

The work now brought under notice, as indicated by the title above, is really a valuable book—either to the specialist or general practitioner, whether as a physician or surgeon. It even includes a good review of the venereal diseases as they affect the female, and gives good therapeutic advice in regard to them. We have only to repeat the regret so often expressed that the publishers do not yet consent to sell the book except upon annual subscription for twelve volumes.

Functional Nervous Diseases: Their Causes and Their Treatment. With a Supplement on the Anomalies of Refraction and Accommodation of the Eye and of the Ocular Muscles. By GEORGE T. STEVENS, M. D., Ph. D., formerly Professor of Ophthalmology and Physiology, Albany Medical College, etc. New York: D. Appleton & Co. 1887. Demi 8vo.; pp. 217. (For sale by West, Johnston & Co., Richmond.)

The author very materially detracts from the popularity of this memoir by stating that since it was presented in 1883 to the Royal Academy of Medicine of Belgium many new views and experiences have presented themselves which he has not incorporated in the present publication. This is unfortunate, as everybody is now seeking "only the latest." A principal object of the author seems to be to point out the many nervous disorders that may be correctly traced to some abnormal or diseased condition of the eyes, and advocates especially that a much more careful search should be made in the eyes than has heretofore been done in order to find the cause and relieve the respective nervous disorders clearly attributable thereto.

Druitt's Surgeon's Vade-Mecum: A Manual of Modern Surgery. Edited by STANLEY BOYD, M. B., B. S. Lond., F. R. C. S. Eng., Assistant Surgeon and Pathologist to the Charing Cross Hospital, and Surgeon to the Paddington Green Hospital for Children, etc. Twelfth Edition. With 373 Wood Engravings. Philadelphia: Lea Brothers & Co. 1887. 8vo. Pp. 985. Leather. (From Publishers.)

We are afraid that the present so-called edition of "Druitt" will remind others than the writer of this notice of that Scripture which tells us not to put new wine into old bottles, lest they break and waste what was good. Unquestionably Druitt's Surgery was an excellent book for either student or practitioner, and it is equally true that what Mr. Boyd has written makes a valuable contribution; but in his effort to follow his predecessor he has not succeeded in improving the plain excellence of Druitt, nor has he allowed himself an opportunity to do justice to his own ideas as to what ought to have been done. It were better had Mr. Boyd limited himself to the task of getting out a new work on the practice of surgery. The present edition is so fully revised and re-written that but very little, if any, of the original author's text is left. As a new book, then, it is a good one; but as an edition of the old reliable, it is a failure—at least, one would scarcely recognize that this was an attempt at revision of an old familiar standard.

Editorial.

Medical Society of Virginia.

As far as the limits of our space would permit, we have given in this number a synopsis of proceedings of the recent session in this city. The Publishing Committee have just awarded the contract for printing the *Transactions*, and we hope to see the volume out about the first of the new year. It was the common expression of opinion, as we heard it, that the session was a great success in every particular. When such benefits as are evident are to be obtained only by organization, it is past our understanding how it is that any one of the regular profession who wishes to receive from, and to give benefit to his brother practitioner can longer find excuse for not joining the Society. The attendance during the recent session was over 200 practitioners from all parts of the State, besides distinguished visitors from other States, who added very materially to the interest of the session by the contribution of papers and participations in discussions.

We refer with justifiable pride to the distinguished visitors who have from time to time complimented the Medical Society of Virginia by their special visits and participations in the proceedings of the sessions. As we glance the eye down the roll of distinguished guests of the Society during its short life, we find such names as Drs. J. Marion Sims, Lewis A. Sayre, George T. Harrison, William A. Hammond, Milton Josiah Roberts, etc., of New York; Theophilus Parvin, of Philadelphia; J. J. Chisolm, Thos. S. Opie, L. McLane Tiffany, H. P. C. Wilson, Frank Donaldson, Jr., Archer Atkinson, J. S. Conrad, and others, of Maryland; Joseph M. Toner, A. Y. P. Garnett, Joseph Taber Johnson, Patrick J. Murphy, of Washington, D. C.; Henry T. Bahnson, Chas. J. O'Hagan, W. T. Cheatham, and others, of North Carolina; Robert Battey, of Rome, Ga.; Thos. R Evans, of Mt. Carbon, W. Va.; and many others from the South and West. Can any other State Society in the United States show such a record of compliments?

The social pleasures provided for the recent session were exceedingly enjoyably. Each night's session was adjourned in order to accept of the invitations issued. The Medical College of Virginia reserved seats enough at the Theatre on Wednesday night to accommodate all in attendance upon the session, and afterwards gave a banquet; the receptions by Drs. Hunter McGuire and Joseph A. White at their respective homes to doctors and their lady friends on Thurs-

day night was the absorbing subject of social conversation the next morning; on Friday night, Dr. Charles M. Shields gave a reception at his home in keeping with those of the previous nights; and after this reception, came the banquet given by the profession of the city, which kept the doctors in good spirits until it was time to break up, because the morning was soon to dawn. Considering the time that was lost from the scientific part of the session, we are disposed to suggest that hereafter not more than one general banquet, reception, or other entertainment should be given.

The Society has not held a session more than once in any other city than Richmond. But now that it has pretty much made one round of the State, it is about to start off on its second to gather in all that it left behind, and also to take in all new material that was not ripe when the first round was made. Next Fall it goes to Norfolk, Va., with an active membership of 650 or more. When the Society met there sixteen years ago, it did not have materially more than 200 members. The *attendance* alone next session, we suppose, will be fully as large as the total membership was then.

In the election of Dr. Benj. Blackford, of Lynchburg, as President for the ensuing term, the Society is acknowledging a duty it owes itself and owes him. Dr. Blackford was one of the prime movers in the organization of the Society in 1870, when he was a young practitioner. He has been a zealous worker for the Society ever since; and now, under his administration, we have a right to hope for many additions to the Fellowship of the organization, if industrious labor can accomplish this desirable improvement. He will shortly make announcements of appointments as Reporters, Delegates, etc., through the Corresponding Secretary, Dr. J. F. Winn, of Richmond.

Medical Examining Board of Virginia.

In the way of matters of professional interest, nothing absorbed so much of the recent session of the Medical Society of Virginia as the proposed amendments to the law regulating the practice of medicine and surgery in Virginia. We regret that our space does not permit a full synopsis of the remarks of the several speakers. We have to satisfy ourselves simply with the record of the resolution which was adopted almost unanimously, asking that the law be so changed as to require candidates to appear for examination before the Board in session, instead of before three individual Examiners. as now allowed. If Dr. Thos. J. Moore, who

conducted the debate in the Society in the interest of the profession and public, had never done anything else to entitle him to the thanks of the profession than he did do in this matter, his services on this occasion should ever be kept in grateful remembrance. It is a pleasure also to note the fact that Prof. Wm. C. Dabney, of the University of Virginia, indicated that that time-honored institution would heartily endorse any action looking to the perfection of the law. We likewise present a letter in this issue from a member of the Board who is not connected with either of the educational institutions of this State (except that he is a graduate of the Medical College in this city), which very pointedly presents the need of the proposed change in the law. And now that the legislators who are soon to make the State laws are elected, it is to be hoped that the Fellows of the Society everywhere will at once put themselves to work in posting their representatives in regard to the demands of the times in order to secure qualified doctors throughout the Commonwealth. Let nothing short of meritorious examinations before the Board be the test of qualification to practice medicine and surgery in Virginia; then the certificate of license by the Virginia Board will be a thing to be coveted everywhere. It will not be long afterwards before other States will fall into line; and then quackery and ignorance will not be tolerated anywhere. This sentiment is growing daily more and more popular, and it is a healthy sentiment that should be encouraged for the people's welfare, as well as for the promotion of professional interests in the State. To sustain the standard of the Medical Examining Board of Virginia, is to help those colleges that have heretofore been vainly seeking to elevate the standard of medical education. As Virginia has taken the lead, and is being heartily supported by a Board of rare excellence and of great powers in her sister State of North Carolina, so let her keep the lead, hand in hand with North Carolina. These States, if their Boards of Examiners are upheld by law, will do more to build up the South in professional matters than anything else that is feasible.

Dr. McGuire's Case of Supra Pubic Lithrotomy.

It will interest members of the Medical Society of Virginia to know the result of the operation for stone in the bladder, performed in the Senate Chamber by Dr. Hunter McGuire before the Society. The man made an uninterrupted recovery, and the wound has entirely closed. The operation was supra-pubic cystotomy, and was very simple. The rec-

tum was dilated by a rubber bag, introduced into the rectum and filled with water. The bladder was then injected with water, and could be seen projecting above the pubis. The incision, three inches long, was made in the median line, just above the pubis. The tissues were then rapidly dissected until the bladder was reached. A small opening was then made in the bladder, and the finger introduced as the water escaped. The stone was at once found by the index finger, and grasped between the index and middle fingers and removed. From the time the first cut was made until the stone was removed was about one minute. A drainage tube was passed through the urethra into the bladder and out at the external wound.

No stitches were placed in the bladder; one stitch through the middle of the external wound was the only one used.

Dr. McGuire stated that the next time he operated in this way for stone, he would dispense with the rectal bag and distension of the bladder; he would simply grasp the stone with a small lithrotrite, and holding the stone close to the abdominal wall, just above the pubis, would cut directly down upon it, and remove it. With a little care the peritoneum was easily avoided.

The Exhibition of Pharmaceuticals, Surgical Instruments, Etc.,

During the recent session of the Medical Society of Virginia, in the Rotunda of the Capitol Building, was exceedingly attractive. Dr. R. G. Cabell, Jr., and his Pharmaceutical Committee, composed of Messrs. T. Roberts Baker, John W. Pierce and Polk Miller, deserve much credit for the manner in which they discharged the duties assigned to them. Among the firms represented, we noted—

Messrs. William R. Warner & Co., of Philadelphia, who exhibited in their usual tasteful manner a full line of pills, chemicals, rare drugs, etc. Their display attracted a great deal of attention.

Messrs. Sharp & Dohme, of Baltimore were on hand with a handsome exhibit of pharmaceutical preparations. This house is regarded in this section of the South as one of the "old reliables."

Messrs. Reed & Carnrick, of New York, made a fine impression on the visitors by the success of the several experiments made, to show the digestibility of their preparations of "soluble foods."

Mr. C. N. Crittenton, of New York, distributed samples of sulphur and of pine tar soaps, etc.

The Mellier Drug Co., of St. Louis, were in attendance with

a fine display of saddle-bags, which are becoming so popular all through the country. They also exhibited some of the preparations which are making this house so extensively known throughout the United States because of their excellent virtues.

Messrs. Budwell & Christian, of Roanoke, Va., made a "first-class" impression on their medical acquaintances who have learned the value of their preparation of cod-liver oil and arsenic.

Mr. T. Roberts Baker, of this city, exhibited some of his preparations, especially cod-liver oil, etc.

Messrs. Parke, Davis & Co., of Detroit, Mich. The exhibit was under the charge of Drs. Bird, Shepherd and McCausland, and was not only beautiful, but very instructive. One table was devoted to new and rare crude drugs. The second to gelatin products, empty and filled capsules (the latter both hard and soft). They were much admired. On the third table were displayed artificial medicinal plants, made by special order, under the supervision of Inspector Shin, of the Royal Gardens, Breslau. So natural were they that many desired to know how they could be kept so fresh. Also four groups of drugs, cascara sagrada, coca, dandelion and golden seal—each group showing the crude bark leaves or roots—the fineness to which they are reduced for manufacturing purposes; the dregs (after the expression of the fluid extract), the solid, fluid and powdered extracts, and all the *finished* products of each group. The alkaloids of coca (cocaine) and golden seal, hydrastine and berberine were greatly admired.

Geo. S. Davis, medical publisher, exhibited samples of journals. *Therapeutical Gazette, Medical Age, American Lancet, Druggists' Bulletin* and *Index Medicus*. The physician's Perfect Call-List and Record, the physician's Leisure Library, binders for journals, and a variety of medical books, of which he is the publisher.

Valentine's Meat Juice at the Head.

From a report on some "Meat Extracts," in the *Bristol* (England) *Medico-Chirurgical Journal*, September, 1887, we quote as follows: "We have recently inquired into the dietetic and medicinal value of these preparations. Of these, Valentine's Juice is now a well-known and much-valued restorative in conditions of great exhaustion. It is a fluid of a blood-red color, having .04 per cent. of the amount of color in blood; it is of syrupy consistence, readily

soluble in water, of neutral reaction, and perfectly free from sediment. Its spectrum gives two lines:—one on the E side of D; the other on the F side of E, answering to the characteristics of hæmochromogen (Stokes's reduced hematin). It contains coagulable albumen in solution amounting to about 7.0 per cent.; nitrogenous extractives soluble in alcohol, 11.6 per cent.; matters insoluble in alcohol, including inorganic salts, about 9 per cent., and water, 72.4. Summary:

Water	72.4
Coagulable albumen	7
Salts and extractives	9
Extractives soluble in alcohol	11.6
	100.0

"The aqueous solution has an agreeable taste, little digestion is necessary, and its composition shows that its value for blood-making must be very high. A fluid with seven per cent. of soluble albumen is something more than a mere stimulative restorative; it supplies available nutriment for blood-making in an easily assimilated form. Few patients dislike it, and these dislike all other similar foods for the sick. We have found it to be of the highest dietetic value, and it may be well spoken of as the most perfect of beef preparations." [That it is "the most perfect of beef preparations" accords with the views of many eminent physicians throughout the civilized world. We confess to a local pride in seeing the preparation of Mr. Valentine so highly commended by foreign eminent authority.]

Medical Flora of South America,

Was the title of a lecture to the Medical and Pharmaceutical professions of this city, delivered in the Rooms of the Young Men's Christian Association, by Dr. Henry H. Rusby, on Thursday night, November 10th. The lecture was both entertaining and instructive, and an appreciative audience was present. Dr. Rusby has spent several years in the Amazon region especially, as the special agent of that excellent firm, Messrs. Parke, Davis & Co., who are always in the lead in matters pertaining to original research in regard to medical botany.

To the Liebig Company,

Of New York, are the special thanks of the Medical Society of Virginia due for the liberal contribution of all the Imperial Crown Sherry and Orange wines enjoyed by the

Fellows on the night of the general banquet, October 21st. Never before in the history of the Society has such a contribution been made for the enjoyment of the members. This contribution is the more highly prized as the Fellow of the Society, through whom the present was made, was requested at the time not to make the facts known; and it is only now that consent has been secured to make this public acknowledgment. It is only with this purest of the best sherries that the Liebig Company make all of their renowned Coca preparations. Hence the excellent reports that are heard from all quarters regarding the results of the medicinal use of their preparations.

The Western Pennsylvania Medical College,

At Pittsburg, began its second annual regular course on Tuesday, September 27th, with a class of nearly 100. The introductory address was delivered by the Secretary of the Faculty, Prof. W. J. Asdale. He congratulated the class that they entered as students of medicine at an auspicious time—that the *science* of medicine was rapidly developing; that grand and great achievements were promised in the near future; that a new pathology was being created on an endurable basis, and a new therapeusis is to be formulated. This college requires an entrance examination and provides a three years' graded course. Its success has been unexampled.

The Stenocarpin or Gleditschin Controversy.

Everbody knows by this time, through circulars or journals, that the claim of stenocarpin to a right in the list of "new discoveries" is being fiercely denied, and that the charge of fraudulent publications has been made against certain houses of heretofore good repute. Messrs. Parke, Davis & Co., through their chemist, announce that the "discovery" is an arrant fraud; and that the agent called "gleditschin" is nothing but a mixture of cocaine and atropia. Prof. F. G. Novy, of Ann Arbor, through the November number of *Pharmaceutische Rundschau,* makes a like announcement. The more pronounced mydriatic effect of a mixture of cocaine and atropia has long been known to the ophthalmologists of this city, where the use of the mixture has long been common. And yet in the face of these statements, we find in a recent issue of the *Medical Record,* a challenge issued by Dr. J. Herbert Claiborne, Jr., in the name of Mr. Goodman and Dr. Seward, for a chemical and

a physiological examination of the drug called stenocarpin or gleditschin, and an agreement to publish the result of the examination. While we confess that the present amount of evidence would seem to indicate that Drs. Claiborne, Knapp, Jackson, and others who have extolled the virtues of the "new local anæsthetic," have been grossly imposed upon and meanly made use of in the journals, still as a suspension of judgment is asked for by Dr. Claiborne (who we know too well to allow of even the suspicion of connivance at a fraud), we would ask our readers not to form opinions until the full amount of evidence is in hand, which is promised to be furnished soon.

New Edition of Gray's Anatomy

Is announced as about to be issued from the press by the excellent publishing house of Messrs. Lea Brothers & Co., of Philadelphia. This new American is taken from the eleventh English edition, and is thoroughly revised and re-edited, with additions, by Dr. Wm. W. Keen, of Philadelphia, than whom no better selection could have been made for the task. A revised edition of *Holden's Landmarks* is added to the work. And to make the work still more useful, the new edition possesses a marked feature in the use of colors in illustration wherever they can be of service in enabling the eye to more readily follow the details of anatomical construction. Notwithstanding the unavoidable increase in size, the prices will be: $6, in cloth; $7, full leather; in colors, only $1.25 extra is charged.

The Department of Analyses, Selections, etc.,

Is incomplete this month, according to our plan of having it represent every original article appearing the month before in each of the Southern medical journals, because of the greater interest at this time attached to the report of the proceedings of the Medical Society of Virginia. The "synopsis, selections, etc.," are, however, prepared, and will appear with others for this month, in our December number.

Dr. M. D. Hoge, Jr.,

Has returned to this city to begin practice, after the absence of a year on a trip around the world with a patient. He is looking well, and we meet him again with a welcome. It was to him that the Richmond Medical and Surgical Society was so much indebted for its rejuvenation. We trust that he will again give it a new life.

Physician's Visiting Lists or Call-Books for 1888

Are beginning to be issued by the publishers. Two good ones are already on our table. The "old reliable" *Physician's Visiting List*, of Lindsay & Blakiston, is simple and complete, and well suited to the size of one's coat pocket. It has a pocket, a pencil, and is closed with an easy fitting tuck. For 25 patients a week, price $1; for 50 patients, $1.25. Address Messrs. P. Blakiston, Son & Co., Philadelphia. *The Physician's Perfect Call-Book and Record, from* 18— *to* 18—, by Dr. G. Archie Stockwell, is arranged for 32 patients weekly, and is an excellent "call-book." It is published by Mr. George S. Davis, of Detroit, Michigan, and is mailed for $1.50. It contains a great number of useful tables and notes for emergencies, etc.

Dr. Harvey Black,

Superintendent South Western Lunatic Asylum, is at St. Luke's Home, under the care of Dr. McGuire. Dr. Black had vesical calculus.

Baltimore Microscopical Society.

The officers-elect for the year 1887–8 are Prof. George L. Smith, *President;* Edward Huber, D. D., *Vice-President;* Dr. Robert T. Wilson, *Treasurer and Secretary.*

Obituary Record.

Dr. William Selden,

Of Norfolk, Va., died at his home November 7th, 1887. He was born in Norfolk, August 15th, 1808. He graduated in medicine from the University of Pennsylvania in 1830. He spent the two succeeding years in hospitals in Paris and London, and then returned to his home, where he has ever since been in practice until two or three years ago, when failing health compelled him to desist. The Medical Society of Virginia was greatly indebted to him for his untiring interest in it as long as his strength would permit him to work for it. We have not the space in this issue to allow of a fuller notice, but we doubt not that his brother doctors of Norfolk will furnish a biographical sketch for publication. As a great and good man—a benefactor in the highest sense of the term—we shall ever keep him in remembrance.

VIRGINIA
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RICHMOND, DECEMBER, 1887.

Original Communications.

ART. I.—**Bone Surgery. Report of Operations, Performed on Twenty-five Individuals, in which the Electro-Osteotome was Used as the Bone-Cutting Instrument.*** By MILTON JOSIAH ROBERTS, M. D., Professor of Orthopedic Surgery and Mechanical Therapeutics; Visiting Orthopedic Surgeon to the New York City Hospitals, on Randall's Island; Consulting Orthopedic Surgeon to the Woman's Hospital, Brooklyn, etc.; New York, N. Y.

All the operations referred to in this paper have been performed since September 8th, 1883, for it is only since that date that the electro-osteotome has been used in actual operations upon the living human subject.

The cases reported are not intended as a statistical argument in favor of any particular theory, method of operating, special form of surgical dressing, or kind of materials used as dressing; they are too few in number and too varied in kind to serve any of these purposes. As is known to many, they form only a very small part of the personal experience which I have had in the domain of operative bone surgery, both before and since the invention of the electro-osteotome. It will, therefore, be understood that the opinions

*Read October 20th, 1887, before the Medical Society of Virginia, at its 18th Annual Meeting, and contributed to this journal, with the permission of the Committee on Publications.

herein expressed are not only based upon personal experience with a much larger number of individuals operated upon than form the basis of this paper, but also are supported by more or less extended personal observation of the work of others.

The OBJECTS OF THIS PAPER are three:

First, to illustrate the working and method of using what is believed to be the safest, easiest of management, most rapid, most complete, and generally efficacious bone-cutting instrument yet brought to the notice of the medical profession.

Second, to illustrate the advantages and methods of using instruments of precision, mathematical formulæ and tables in bone surgery.

Third, to call attention to some novel bone surgical operations.

Matters of General Applicability.

There are some matters of general applicability which should be considered at the outset.

(*a*) *The Condition of the Patient.* The general condition of the patient at the time of any bone surgical operation is a matter which should always receive the attention of the surgeon. Evidences of tubercle should always be sought for. More than one examination of the urine should be made. Upon the findings must the prognosis, to a very large extent, rest.

(*b*) *Anæsthesia.* For prolonged and extensive operations the use of a general anæsthetic will usually be found most satisfactory. As to which anæsthetic is the best, the opinion of operators in different parts of the world varies. If there are no contraindications, my advice is to select that one with which the operator, or the one who assumes the responsibility of administering the anæsthetic, is most familiar. Operations of short duration can, however, be very satisfactorily performed under local anæsthesia. If the technique of local anæsthesia be thoroughly understood and carried out, it is even possible to perform operations requiring a very considerable period of time (an hour or more), without discomfort to the patient. All purely cutting operations, whether of the soft or hard parts, or both combined, are well borne under local anæsthesia; it is the pulling,

tearing and pressure of tissues which are not well borne. I believe I was the first to perform bone surgical operations of any considerable magnitude under cocaine anæsthesia.* I have frequently made simple and cuneiform osteotomies of the long bones under cocaine anæsthesia, without any apparent discomfort to the patient, and have even excised such large joints as the elbow, knee and hip with little or no suffering. Dr. J. Leonard Corning's method of administration of cocaine was the one employed.

(*c*) *Antisepsis.* In city practice, whether public or private, I am of the opinion that, under strict antiseptic precautions, much better results will, as a rule, be obtained with than without them. Still, in country districts, under favorable hygienic conditions, I would not, if it were necessary, hesitate to perform the most formidable bone surgical opertions without the use of any antiseptic whatever. Not infrequently in hospital practice I have been forced to operate under very meagre antiseptic precautions, and I must candidly admit that for the most part, such operations have been followed by admirable results. On one occasion, with only meagre antiseptic precautions, but with due regard to cleanliness, I unwittingly performed four femoral supra-condylar cuneiform osteotomies, in a ward where there were two patients suffering from diphtheria, and no evil consequences followed; there was union by first intention.

In making these admissions, I do not wish them to be understood as arguments against thorough and painstaking antiseptic precautions, for in the light of our present knowledge, I believe that the surgeon is under obligations to give his patient the benefit of a doubt, if there be any, regarding their efficacy, and to use them in accordance with the most approved methods.

Extraordinary precautions are demanded in all operations upon bone where diseased tissues are to be encountered; for here it is essential to cut through healthy parts into diseased parts, and not infrequently again into healthy parts, thereby greatly increasing the risks of septic

*Cocaine in Bone Surgery, *New York Med. Rec.*, October 17th, 1885, page 431. Cocaine Anæsthesia in Femoral Supra-Condyloid Osteotomy and Excision of the Hip-Joint, *New York Medical Journal*, October 24th, 1885, page 459.

infection. The antiseptic precautions should involve attention to the disinfection of the air, the patient, the operator, his assistants, and all instruments used in wounds or about the patient.

(*d*) *Preparation of the Patient for Operation.* In all operations of any magnitude, it is desirable that the patient should be under the direct observation of his medical attendant prior to the operation for a period varying from a day or two to several weeks, according to circumstances. Patients who have travelled a long distance should be afforded an opportunity for rest prior to being operated upon. Not infrequently it is of great advantage in certain conditions of the nervous system, to place the patient fairly under the influence of bromides. By so doing, it is probable that much shock to the central nervous system is avoided. The condition of the circulation should be inquired into, and if found in a low state, tonic treatment should be instituted. A night of good rest prior to an operation, is of much importance to the patient. The patient's stomach should be empty or nearly so. For this reason, among others, some surgeons prefer to operate early in the morning before breakfast. If the operation is to be performed at mid-day, or shortly afterwards, the patient may be permitted to partake of a cup of tea and some dry toast in the morning. In weak subjects, I am in the habit of administering a moderate dose of whiskey or brandy, diluted with water, just prior to the administration of the anæsthetic, when ether or chloroform are used.

The toilet of the body of the patient is a matter of no little importance. It should be made by thoroughly cleansing the entire body, washing it first with soap and water, and afterwards rinsing in plain water. This may be done the day prior to or on the morning of the operation. The patient should be clad in clean under-garments. At the time of the operation, the part of the body to be operated upon should be again washed with soap and water, and then rinsed in carbolized water or other antiseptic solution.

In bone surgical operations, whenever possible, the limb should be rendered bloodless, and maintained in a bloodless condition during the entire procedure.

(*e*) *Incision.* The direction of the incision in the soft parts should be, as a rule, in a line with the long axis of the bone to be operated upon. In this way, transverse division of the muscular fibres is for the most part avoided. The location of the incision should be such as to reach the bone by the shortest route through the soft parts. In operating with the electro-osteotome. the soft parts are thoroughly protected, and cuts through the bone can be made in any direction. It is best to first make a short incision in the soft parts, which can be enlarged as occasion may require.

(*f*) *Protection of the Soft Parts.* In operating with the electro-osteotome, as has just been stated, the soft parts are to be thoroughly protected against any possible injury. This is accomplished by the use of a form of protecting retractor, which I have invented for the purpose. These protractors are made to be used in pairs or singly.

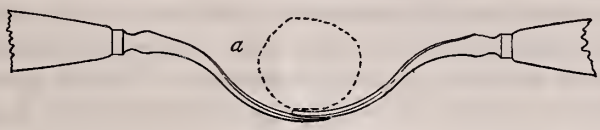

Fig. 1.

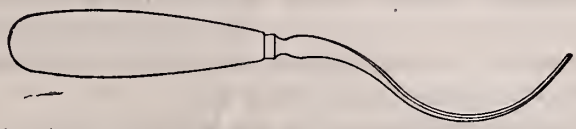

Fig 2.

Figure 1 represents those used in pairs, while *Figure* 2 shows the form of retractor intended to be used singly. As will be seen, this latter retractor has a longer curve than the former. Having made a clean cut incision down to the bone, the soft parts on either side of the incision are picked up with a pair of dressing forceps, and the cellular tissue between them and the bone is divided with a scalpel, so as to admit, without the use of undue force, the end of the protecting retractor, which is placed in position close to the bone between it and the soft parts, care being taken not to disturb the periosteum.

(*g*) *The Bone-Cutting Instrument* which has been used in

all the operations reported in this paper is the *electro-osteotome.* To the elaboration and development of this instrument, I have devoted much time, labor and money during a period of about five years. From time to time during this period I have called the attention of the profession to the successive stages of the development, and to the merits of the electro-osteotome as a bone-cutting instrument.* I will not, therefore, now detain you with a narrative of the details of its mechanical construction, but will simply demonstrate to you its applicability to the accurate, smooth and rapid cutting of bone, under all circumstances and in all positions. The instrument and operative plant which I present to you on this occasion represent the latest developmental stage.

(*Here followed demonstrations of the use of circular, straight and sectional saws, and of drills, burrs and trephines in connection with the electro-osteotome.*)

(*h*)*Illumination.* It is often very convenient, especially late in the afternoon, or on dark days, to have available some means of artificial general illumination. This I secure in two ways. First, by an independent electric light, mounted on an adjustable bracket, which can be placed in any desired position. Second, by means of an incandescent lamp, with a reflector back of it, both being mounted on a pedestal which is attached directly to the cylindrical cover of the electro-osteotome. For the illumination of bone cavities small incandescent pea lamps may be used.

(*i*) *Irrigation.*—In the past it has been my practice for the most part to irrigate all wounds with an antiseptic solution. I have used for this purpose solutions of *carbolic acid, corrosive sublimate* and *hydronaphthol.* When operating for the correction of deformity, where there is no diseased tissue to

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"The Electro-Osteotome: A New Instrument for the Performance of the Operation of Osteotomy, and a New Form of Retractor." Communicated to Northwestern Medical and Surgical Society of New York, October 17th, 1883. *New York Medical Record*, October 27th, 1883. *Illustrirte Monatsschrift Arztlichen Polytecknik*, January, 1884. *Archivio di Ortopedia*, Vol. 1, p. 364, 1884.

"Description and Practical Demonstration of the Working of Roberts' Improved Electro-Osteotome, New Electrical Illuminating Apparatus and a New Form of Portable Storage Battery." Communicated to the New York Academy of Medicine, February 19th, 1885. *Medical Record*, February 28th, 1885.

"A New System of Operative Bone Surgery." Read before the Surgical Section of the Ninth International Medical Congress, Washington, D. C., September 9th, 1887.

be encountered, I am now using hydronaphthol almost exclusively, and thus far with the most satisfactory results. It is non-irritating and non-poisonous. It may be used in the same strength solutions as corrosive sublimate. When cutting through healthy tissues into diseased tissues and through diseased tissues again into healthy tissues, as is sometimes necessary, I am still in the habit of making free use of a weak solution of corrosive sublimate, for I entertain the opinion that under these circumstances a far greater risk is incurred by the patient operated upon than when no diseased tissue is cut into. Hence, every possible precaution should be taken for the safety of the patient.

(*j*) *Sutures.* In operating for the correction of deformities in which a complete transverse section of the bone is made, the question always arises as to what is the best mode of keeping the cut ends in apposition during the process of union. For the most part, I have depended upon the dressings—the bandages and splint—to perform this function, using no sutures. I have never had a case of non-union when no sutures were used, but have had delayed union in two cases. Extreme care in keeping the cut ends of the bone in apposition, however, is necessary in applying the dressings when no sutures are used.

Sometimes it is desirable to make use of sutures. This is always the case when any strain is likely to be brought upon the bones. They are also of advantage when the operation has been performed in a locality where it is difficult to apply fixation dressings.

The function of the suture, I take it, is only to render it certain that the cut ends of the bone are maintained in apposition until the fixation dressing is applied. After this, the dressing holds them in apposition. On this account I prefer to use an absorbable suture, and have made use of them in this way with satisfaction during the past four years. Recently I have used the tendons from the tail of the kangaroo. They are remarkably strong and are not absorbed as readily as catgut.

It is not, however, possible, when operating in some localities, to apply a fixation dressing which can be absolutely

depended upon to hold the ends of the divided bone in apposition for a sufficient length of time to permit of union taking place. Under such circumstances, the function of the suture extends over a longer period than is required for the application of the bandages and splint. Here silver-wire sutures are required.

(*k*) *Closure of Wounds.* When operating in the absence of disease or for the correction of deformity, after placing the bones in apposition, the wound should be entirely closed, so as to secure primary union. The only exception to this rule that I can call to mind is when the capsule of a joint is entered, as when operating for angular deformity, the result of joint disease. In these cases, though the joint be anchylosed, there is usually a small part of the synovial membrane which is not adherent to the bone and which still secretes synovial fluid.

(*l*) *Drainage.* Under the last-named circumstance, viz., when the capsule of a joint is entered, it is necessary to introduce a small drainage tube. Drainage is also nearly always demanded when operating for the removal of diseased tissues. When possible, such drainage should be what is styled "through drainage."

During the period covered by the cases reported in this paper, I used carbolized or iodoform gauze dressings, applied directly over the site of operation. These were secured in apposition, first, by means of roller bandages of the same material, and over them a retentive splint was applied, which in turn was secured in position by means of an ordinary roller bandage. Later I used gauze impregnated with corrosive sublimate, and more recently still have used hydronaphtholized surgical dressings.

(*m*) *Fixation Splint.* The plaster-of-Paris dressing may be used as a fixation splint. For adolescent and adult patients I see no objection to it; it is cheap and everywhere obtainable. For young children, however, it is objectionable, on account of the liability of its becoming softened by the absorption of urine or other excreta.

Of all the materials which I have used for *fixation splints*, *guttapercha* in sheet form and from three-sixteenth to one-quarter inch in thickness is the cleanest and most generally

useful. It is impervious to fluids, and, therefore, cannot become weakened by their absorption. Before using, the sheets should be punctured with a small sized punch at the intersection of lines marked on its surface, forming squares of an inch and a half or two inches. (See Fig. 3).

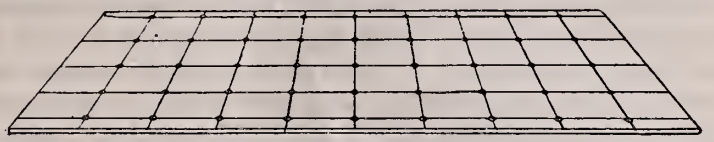

Fig. 3.

These afford the requisite ventilation and allow of the evaporation of the insensible perspiration. Sheets of the required dimensions thus punctured are dipped into water at or near the boiling point, and when soft and perfectly pliable, are applied to the limb directly over the antiseptic dressings. The guttapercha can be readily made to conform to the external contour of the limb and dressing. It is secured in position by means of a roller bandage and soon hardens; after which it retains its position and form permanently.

It is my custom, when the bones are not sutured, and usually when they are sutured, to hold with my own hands their cut ends in apposition, not only from the time my assistant begins closing the wounds in the soft parts, but during the application of the antiseptic dressings and the whole subsequent period occupied in the application of the guttapercha splint and its becoming hardened.

All limbs operated upon should have a final roller bandage firmly applied over all dressings, and extend from the extreme distal end—from the toes or fingers—to the proximal end, or junctured with the body.

Sometimes, as after excision of the hip joint, or after an operation for angular deformity resulting from hip-joint disease, it is desirable to place the patient upon a wire cuirass or some form of portable fixation apparatus, to which the limbs are directly secured. Under these circumstances, no plaster or guttapercha splint is required.

(*n*) *Position or Attitude of the Patient after Operation.*—The

position or attitude of a patient after operation is a matter of no little importance. He should be placed in a position of supine recumbency with the distal end of the limb operated upon slightly higher than the body, the limb forming an angle with the central longitudinal axis of the body not exceeding ten or fifteen degrees. The practice of elevating the limb so as to form a right angle with the central axis of the body I believe to be pernicious, as I have seen instances of non-union in patients who were placed in this attitude after operation, and which I feel confident was due to the fact that by this means the limbs were so depleted of blood as not to be provided with the requisite nutrition to carry on the local reparative processes.

(*o*) *Trained Nurses.*—It is a great advantage to the surgeon to have the co-operation of thoroughly trained nurses during a period of at least a week or ten days—preferably longer—following all bone surgical operations. The closest attention on the part of the nurse should be given to keeping the dressings dry; for, should they become moistened or saturated with urine or other excreta over the site of operation before union of the soft parts has taken place, not only would suppuration ensue, but general septic poisoning of the patient might result.

Then again, the temperature, pulse, and respiration of the patient should be regularly observed at stated intervals and recorded. Such observations and record will warn the surgeon of impending danger, or assure him of the successful progress of his patient towards recovery. After the period of reaction has passed, even though a formidable operation has been performed, a temperature above 100° should be regarded with anxiety.

Operations.

Having considered matters of general applicability in bone surgical operations, we are now in a position to take up and discuss special operations.

The operations reported in this paper may be conveniently considered under three heads:

First. Operations for deformity of the long bones due to general disease or weakness.

Second. Operations for deformities resulting from local disease.

Third. Operations for the cure of disease.

Operations falling under the last named division may be subdivided into those (a) in which both the diseased and a large amount of healthy tissue is removed, as in the excision of joints; and (b) in which it is aimed only to remove the diseased tissue.

Operations for the Correction of Deformity in Long Bones.

CASE I. On September 9th, 1883, in the Infants' Hospital, on Randall's Island, New York city, my first operation upon a living human subject with the electro-osteotome was performed. Dr James R. Healy, Medical Superintendent of the Randall's Island Hospitals; the late Dr. Frederick Stevens, of New York; the medical gentlemen constituting the House staff, and Mr. Edward P. Suter, of the Electro-Dynamic Company, were present and witnessed the operation.

The patient was a male, aged 5 years, with a double in-knee deformity of 20°. Having rendered the limb bloodless by means of a solid rubber bandage, and cleansed it first by washing with hot water and afterwards rinsing with plain carbolized water, a longitudinal incision about 2½ inches in length, along the line recommended by Macewen, upon the inner anterior aspect of the thigh, commencing just above the condyle of the femur, was made down to the bone. A pair of protecting retractors, curved as represented in *Fig.* 1, was now introduced between the bone and the soft parts. The curve of these retractors had been determined by actual experiment upon the cadaver. They were introduced through the incision about the bone after the fashion of inserting the blades of an obstetrics forceps about the head of a child. By depressing these retractors the soft parts were pushed back and the bone fully exposed. The plates of the large primary batteries, used to furnish the motive power, were lowered and the rapidly revolving circular saw blade of the osteotome was brought down upon the bone at such an angle that the line of section through the bone formed one side of a small wedge, the base of which was towards the mesial plane of the body. The second section was begun a few millimetres away from the first, and the circular saw inclined to the bone at such an angle as to reach the opposite side of the bone at the exact point of the first section. In both instances, the bone was cut entirely across, so that a perfectly shaped wedge of bone, with smooth cut sides, was removed through the incision.

This, I believe, was the first wedge of bone ever removed entire from the femur for the correction of genu valgum, all assertions to the contrary notwithstanding. I

make this statement because I am thoroughly convinced that in operating upon a living human subject, it is not possible to remove entire by means of the chisel and mallet a wedge segment from any of the long bones.

What was accomplished will be understood by an examination of *Fig.* 4. The line indicates the direction and extent of the incision, while the dotted lines indicate the site and direction of the oblique sections which enabled me to remove a complete wedge-shaped fragment.

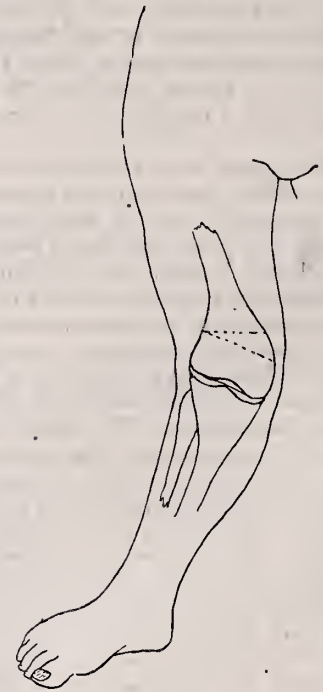

Fig. 4.

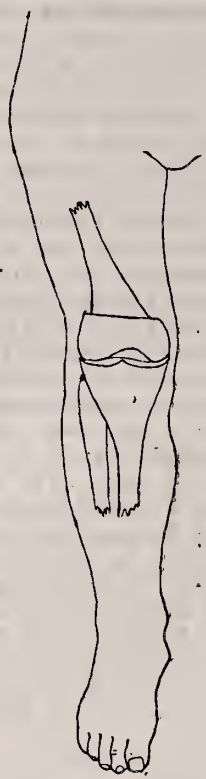

Fig. 5.

After the removal of the wedge of bone an attempt to bring the limb into line was only partially successful, owing to the fact that too small a wedge had been removed. Accordingly, a third oblique section of the bone was made. Upon the removal of the second but thinner wedge-shaped piece, no further resislanee to bringing the limb into line was encountered. It will be understood that the bone and its overlying periosteum were cut directly through. *Fig.* 5 diagrammatically represents

the state of affairs secured by bringing the limb into position and the cut surfaces in apposition. The Esmarch bandage was now removed, the wound irrigated with a carbolic acid solution, and closed with a continuous catgut suture. After closure of the wound in the soft parts, the limb was thoroughly cleansed with carbolized water. Over the line of incision a small piece of oiled silk, coated with Cobalt varnish, was placed in order to protect the wound from the irritation of the carbolic acid dressing, which was applied to the limb directly over the site of operation, and secured in position with a gauze roller bandage. Over this a guttapercha splint was applied and secured in position by a roller bandage.

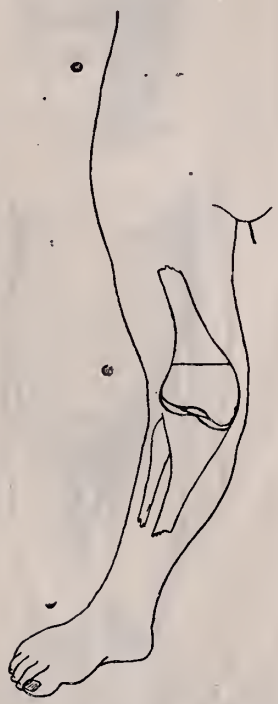

Fig. 6.

Fig. 7.

The same process was repeated with the fellow limb, the only difference being that instead of three sections, it was necessary to make a fourth section before a sufficient amount of bone had been removed to permit of the limb falling readily into line without resistance. The wedge of bone in the limb first operated upon was removed in thirty seconds by the watch; that in the second limb operated upon occupied forty-five seconds.

No sutures were used to hold the bones in apposition. After the application of the dressings and fixation splint the patient was removed to a bed, and his limbs slightly elevated so as to form an angle with the central axis of the body. As the dressings did not show any signs of being soiled by discharges they were not disturbed until six weeks after the operation, when, upon removal, it was found that union in both limbs had taken place without any suppuration whatever.

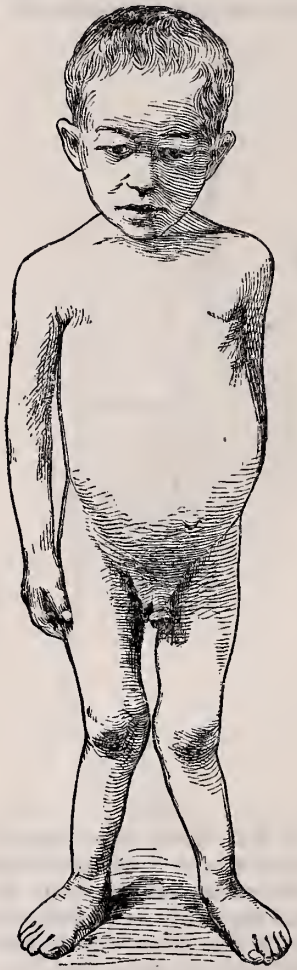

Fig. 8.

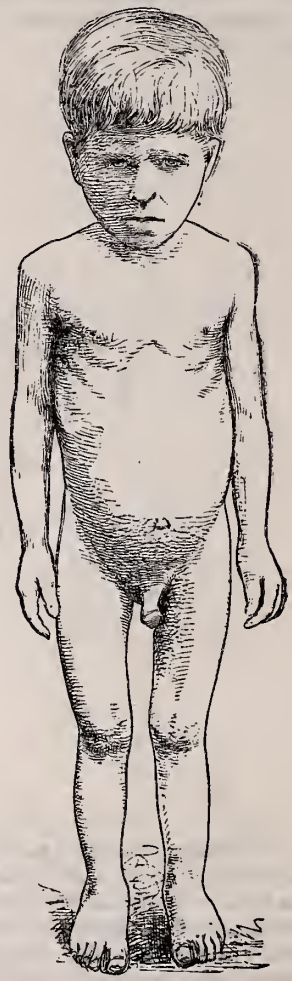

Fig. 9.

CASE II. Female, aged 4½ years, with symmetrical in-knee deformity of 15 degrees. In operating upon this patient the same incision through the soft parts was made, as in the first instance, and one complete section of the femur just above the condyles, as indicated by the dark lines in *Fig.* 6, was made. Instead of making a second section of the bone so as to remove a wedge-shaped piece, as in the first case, I simply gapped the wound in the bone by bringing the limb into line, as shown in *Fig.* 7, leav-

Fig. 10.

Fig. 11.

ing a gap on the outer unexposed aspect of the thigh. The wound was closed as in the first instance, and a dressing applied as before. In this case there was a slight amount of superficial suppuration, but the union of the bone was uninterrupted, and the patient began to walk about the ward at the end of the ninth week after the operation.

CASE III. Patient male; aged 4½ years, with a double in-knee deformity of 20 degrees (see *Fig.* 8). The operation which was performed was a simple supracondylar section of the femur and gapping of the cut surfaces towards the outer aspect of the

thigh. *Fig.* 9 shows the appearance of the patient two months after the operation.

CASE. IV. Patient male, 4 years of age, with double symmetrical bow-leg deformity of 18 degrees. In operating upon this patient a simple section of the tibia from within outward and of the fibula from without inward was made, as represented in

Fig. 12.

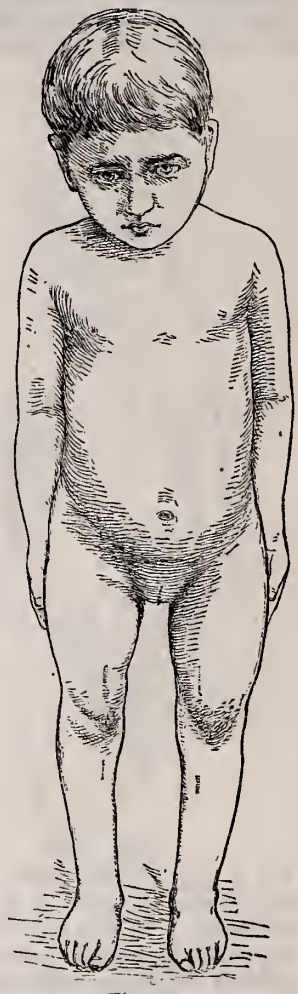

Fig. 13.

Fig. 10 by the dark transverse lines. The limb was brought into position by forming gaps on the inner aspect of both bones, as shown in *Fig.* 11. Union occurred in both limbs without suppuration or untoward symptoms.

CASE V. Patient, female, 4½ years of age, with double bow-leg

deformity of 25 degrees. (See *Fig.* 12.) The same operation was performed as described for the last case. Superficial suppuration occurred in one limb, the wound in the other limb healing without suppuration. *Fig.* 13 shows the appearance of the patient ten weeks after the operation.

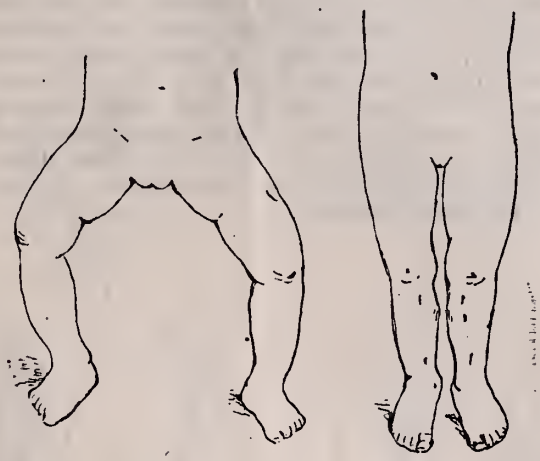

Fig. 14. Fig. 15.

CASE VI. Exaggerated bow-leg deformity of 43 degrees in a female aged 3½ years. (See *Fig.* 14.) The deformity in this case appeared to be entirely below the knees, but involved both the

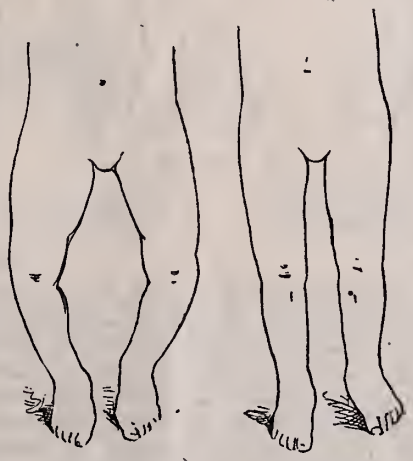

Fig. 16. Fig. 17.

upper and lower extremities of the tibiæ and fibulæ. I, therefore, resolved to make sections of these bones at their upper and lower ends. Simple section of both tibiæ and both fibulæ was made just distal to their proximal epiphsyseal junction and proximal to their distal epiphyseal junction. It should be stated, however, that the last named sections were not complete, as I was afraid of interfering with the nutrition of the bones. The wounds in the soft parts were closed with continuous absorbable catgut sutures, and the neccssary gapping of the bones resorted to in order to bring the limb into line. *Fig.* 15 shows the appearance of the patient's legs nine weeks after the operation.

Case VII. Female, aged 3 years, with symmetrical bow-leg deformity of 25 degrees. (See *Fig.* 16.) Here simple section of the tibia and fibula below the knee-joint was resorted to. *Fig.* 17 shows the result obtained.

Fig. 18.

Fig. 19.

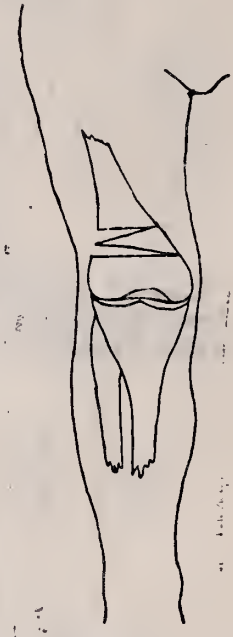

Fig. 20.

Case VII. Male, aged 4 years, with a double bow-leg deformity of 23 degrees. By careful manual examination of the patient, I made out that not only the tibia and fibula, but also the lower end of the femur were concerned in the production of the deformity. I, therefore, made a simple supra-condylar section of both femurs, and simple section of both tibiæ and both fibulæ. The limbs were brought into apposition by the gapping of the wounds in the bone, and secured in place by a gutta-percha fixation splint. All the wounds united without suppuration. *Figs.*

18 and 19 show the appearance of the limbs before and after the operation.

CASE IX. Male patient, aged 4 years, with double in-knee deformity of 18 degrees. In this case, instead of making the incision upon the inner anterior aspect, it was made upon the outer anterior aspect of the thigh. This enabled me to reach the outer aspect of the lower end of the femur and make a cuneiform section of the same with the circular saw of the osteotome, beginning at the apex of the wedge instead of at its base. I did not

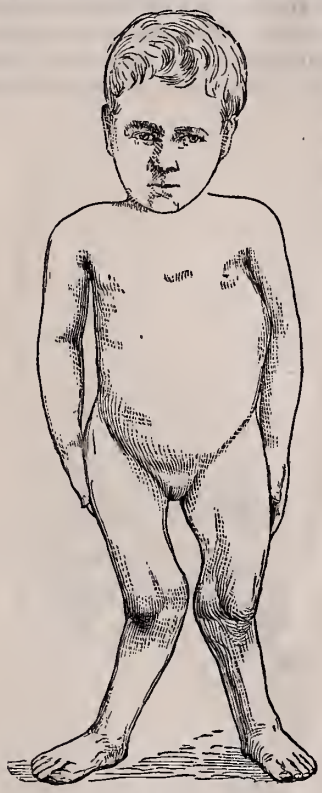

Fig. 21.

Fig. 22.

make a complete section of the bone at either cut, but left the periosteum and a thin layer of bone on the inner aspect of the thigh undivided. The undivided tissue, however, offered very little resistance to bringing the limb into line. *Fig.* 20 diagrammatically represents the condition of affairs after the limb was brought into line. Healing occurred without suppuration or untoward symptoms.

CASE X. Female, aged 4 years and 3 months, one of five chil-

dren of the same parentage, referred to me by Dr. Sarah J. McNutt, of New York, all of whom had aberrations of the long bones of the lower extremities. The deformity is well shown in *Figs.* 21, 22 and 23. In addition to the deformity of the long bones of the lower extremities, there was a marked lateral curvature of the spine of rachitic origin. The child's teeth were badly decayed and very irregular. She had only just begun to talk, and as yet could speak only a few words. In addition to the in-knee deformity, which was marked, there was an antero-lateral curvature of both femurs. The operation was directed solely to the correction of the in-knee deformity. The extent of in-knee deformity for the right leg was 22 degrees. By palpation it was found that the point corresponding to the level of the articular

Fig. 23.

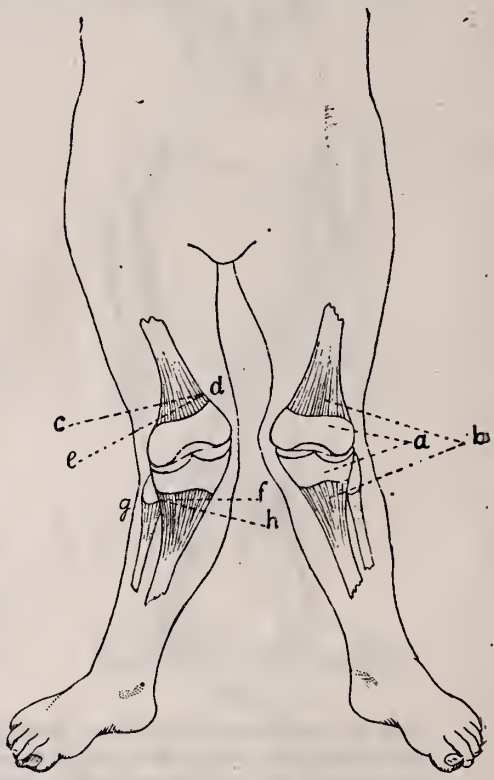

Fig. 24.

surface of the inner aspect of both knee-joints was at a higher level than the point corresponding to the level of the articular surface on the outer aspect of both joints. The condition of affairs which I believe to have existed in this case is diagram-

matically represented in *Fig.* 24. Measuring from the external malleolus, on the outer aspect of the leg, to a point on a level with the articular surface on the outer aspect of the knee-joint, and comparing it with the measurement from the inner malleolus to a point on a level with the articular surface, on the inner aspect of the knee-joint, I found that, in both legs, the measurement along the mesial aspect of the tibia was the longer, the measurements for the right leg being $6\frac{3}{4}$ inches and $7\frac{1}{4}$ inches; for the left leg, 7 inches and $7\frac{1}{3}$ inches. This condition of affairs

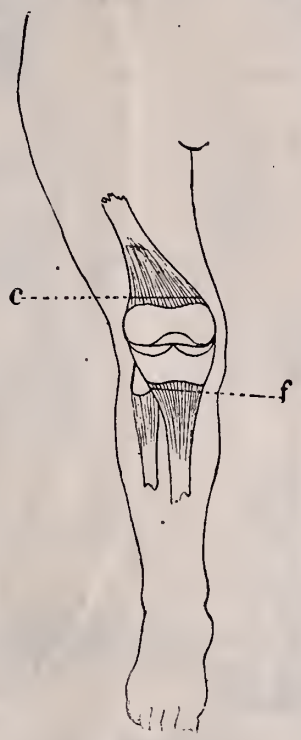

Fig. 25.

is just the reverse of what is found in health; for, normally, the external malleolus projects downward further than the internal malleolus. A wedge-shaped piece of bone was removed from each femur, the base being directed outward, as indicated by the dotted lines *c, d, e, Fig.*, 24. The wedge removed from the tibia had its base directed inwards, as shown by the dotted line *f, g, h.* The incision for making sections of the tibia was made upon the inner anterior aspect of the leg, and for the femur, upon the inner anterior aspect of the thigh. It will thus be seen that in re-

moving the wedge from the tibiæ, section was made by beginning at the base of the wedge; and that the wedges from the femora were removed by beginning at their apices. The resistance to bringing the limb into line, which was offered by the fibulæ, was overcome by fracturing them by manual force. After this had

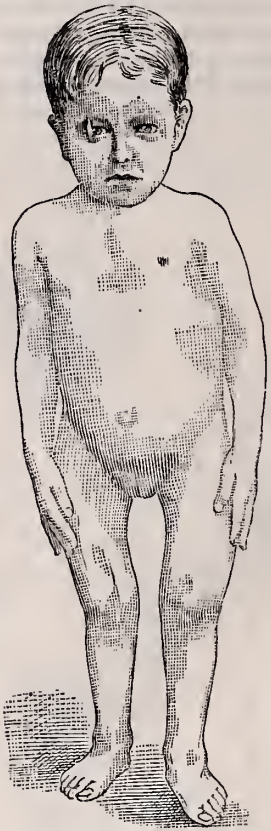

Fig. 26.

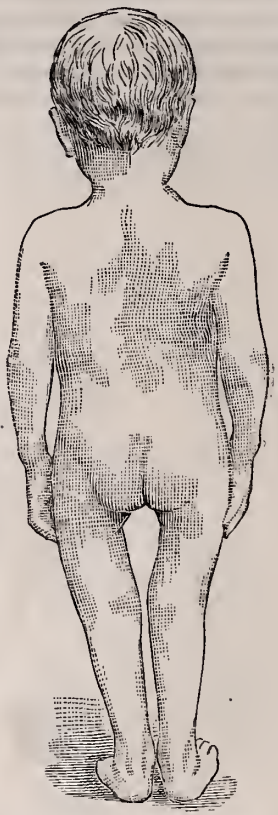

Fig. 27.

been done, several supplementary sections of the bone were found necessary, in order to make the wedge-shaped openings of sufficient size to permit of the limb being brought into line, and the cut surfaces in apposition, The result obtained is diagrammatically represented in *Fig.* 25, the dark lines *c* and *f* indicating the lines of apposition of the cut surfaces of bone. *Figs.* 26 and 27, from photographs by Mr. James W. Stead, taken some ten weeks subsequent to the operation, represent the result obtained, This patient was unusually weak in constitution, and I advised the use of leg splints for a time, to prevent the re-occurrence of the deformity. The patient's circumstances did not ad-

mit of this precautionary measure being adopted, and, as she passed out of my hands, I am unable to report as to her condition some months subsequently.

CASE XI. Patient 5 years of age, male, with double symmetrical in-knee deformity of 16 degrees extent. A supra-condylar cuneiform osteotomy of both femora was made in this case, and the limbs dressed as previously described, excepting that a Bavarian plaster of Paris splint was used to retain the limbs in apposition. Visiting the patient in the hospital wards, forty-eight hours after the operation, I found, to my great surprise and

Fig. 28.

disgust, that the plaster-of-Paris dressing had become saturated with urine and fæces, and that the patient had evidently lain in this condition for several hours, the nurse in attendance having failed to give the patient any attention whatever. Taking the temperature of the patient, I found it to be 102 degrees. The patient died thirty-six hours afterwards with acute septic poisoning. I have always looked upon this death as not in the least due to the operation, but to the gross neglect of the patient subsequently.

CASES XII TO XV, inclusive, were patients ranging from 3½ to 4½ years of age, and all had in-knee deformities from 15 degrees

to thirty degrees in extent. Upon all of them I resorted to the operation of supra-condylar cuneiform osteotomy for the reduction of the deformity. Usually it was found necessary to make supplemental sections in order to increase the size of the wedge of bone to be removed, that the limb might be brought into position without undue resistance on the part of the bone.

Case XVI. Patient female, an Italian child, aged 5 years, with marked deformity of both leg and arm bones. (See *Fig.* 28.) All of the long bones in her body were more or less distorted, the distortion being of rachitic origin. The bones of the arm between the shoulder and elbow were curved, and those of the forearm between the elbow and wrist joint were subjected to a doubled curvature, resembling essentially the letter S. The curvature just above the wrist was so great that the hands, instead of being on a line with the forearm, were almost at right angles to it. The bones of the legs were still more deformed than those of the arms. In crawling upon her hands and knees, the soles of her feet were turned up so as to be on a line with the leg instead of being at right angle to it, as they would normally be. When the child was in a sitting posture on the floor, with the lower extremities extended, the soles of the feet rested squarely upon the floor, as shown in the figure. The patient was unable to stand for an instant. Wedge-shaped pieces of bone, the bases of which were directed towards the convexity of the curvature, were removed from each tibia and each fibula at the point of greatest deformity, protecting retractors being introduced between the bone and soft parts, as already described. Separate incisions through the soft parts were made in making sections of the tibiæ and fibulæ. To reach the fibula it was necessary to cut down upon its concave aspect, and to remove the wedge-shaped pieces

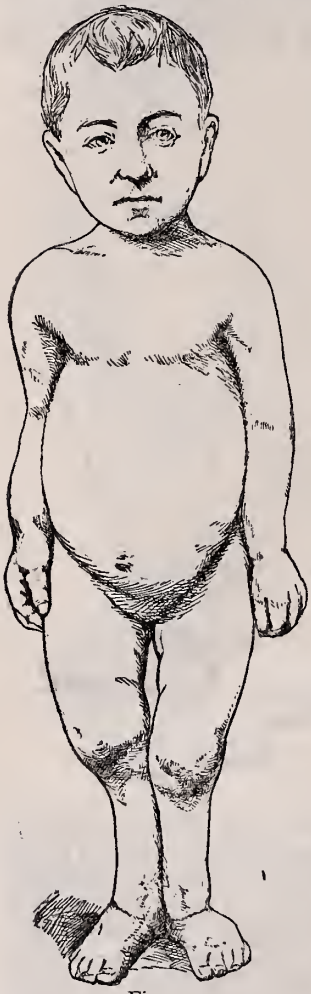

Fig. 29.

of bone, by beginning at the apex instead of the base. After the proper-sized wedges of bone were removed from the tibiæ and fibulæ, the legs were brought into line as nearly as possible, the openings in the soft parts closed, and the limbs, after suitable dressings had been applied, were secured in position by the application of a guttapercha splint. Analogous cuneiform osteotomies were performed upon the radius and ulna of each forearm just above the wrist. Union of all the bones occurred without any suppuration whatever. The result obtained by the operation is shown in *Fig.* 29, from a photograph by Mr. O. G. Mason, some three months after the operation.

CASE XVII. Male, aged 35. The patient had symmetrical hallex valgus of both great toes of about 23 degrees extent. The operation consisted in making a linear incision through he soft parts upon the inner aspect of the great toe and shaft of the first metatarsal bone. The soft parts were directed back. The incision through the soft parts passed through the capsule of the joint. It was impossible to place in position the retractors ordinarily used when operating upon the shafts of any of the long bones of the upper or lower extremities. The soft parts were therefore, held back with tenaculâ. A small circular saw was placed in the saw-bearing head-piece of the electro-osteotome, and an oblique section through the distal end of the first metatarsal bone was made. The section was begun a little proximal to the extreme end of the first metatarsal bone on its inner aspect, and an oblique cut made through to the opposite side at the extreme end of the bone, thus removing its distal articular surface. The proximal articular surface of the first phalanx of the great toe was next removed by an oblique incision directed inwards, and reached the opposite side close to the proximal end of the bone. The directions of the two incisions were such as to form a wedge, the base of which looked toward the mesial plane of the body. The cut surfaces were brought in apposition, and secured by means of silver sutures, there being considerable resistance from the soft parts in consequence of their having so long been in a distorted position. The wounds in both great toes healed kindly, though there was in each instance superficial suppuration. The result was abolition of the joint and a straight toe. After union had taken place, the silver sutures were removed.

Instruments of Precision, Mathematical Formulæ and Tables.

From a perusal of the brief histories of the foregoing cases, it will be appreciated that in the performance of the cuneiform osteotomies here reported, much uncertainty existed. This uncertainty was due to the impossibility of determining just how large a wedge-shaped piece of bone should be removed in a given case to correct the deformity for which

the operation was performed. Not infrequently three or more sections of bone at the site of operation were necessary before the limb could be brought into line. On some occasions too much bone was removed, and it was necessary to leave a gap between the cut surfaces. Though several of the cases reported show admirable results obtained where gaps of considerable size were left between the cut ends of bone—where, in fact, no wedges were removed, but the deformity was overcome by the gaping of the incision in the bone—I am not satisfied, from my personal experience, that it is a desirable method of operating. In fact, I believe the results would have been much different from what they were, in some of these cases, had the patients been other than very young subjects.

So thoroughly impressed with the importance of having the cut surfaces of divided bones placed in apposition am I, that I have spared no labor or expense to elaborate precise methods by means of which operative bone surgery for the correction of deformities of long bones can be reduced to an exact science. The first step taken in this direction was a paper which I read before the Medical Society of the State of New York, February 3d, 1885.* In this paper certain instruments of precision were described, by means of which the exact extent of deformities could be measured in degrees of a circle. Later on, I invented a mathematical instrument, by means of which, when the extent of deformity to be corrected, and the diameter of the bone at the site of the operation were known, the dimensions of the base of the wedge were anatomically calculated, and could be read off from the graduated bar forming a part of the instrument.†

Though this instrument, the sphenometer, was exceedingly satisfactory, and when manipulated with care and skill was all that could be desired in the hands of the operator, I felt that the results obtained by it were of such great and prac-

*Anatomical Geometry and Toponymy; an Introduction to the Scientific Study of Deformities, with a Description of New Mathematical Instruments. *Medical Record*, February 21st, 1885. Proceedings of the Medical Society of the State of New York, 1885.

† "The Sphenometer; a New Instrument of Precision in Bone Surgery." *New York Medical Journal*, November 20, 1886.

tical value that they should be placed at the disposal of members of the profession without necessitating their purchasing the instrument. To this I have constructed sixteen tables, involving nearly 15,000 trigonometrical calculations.* By means of these tables, knowing the degree of deformity to be corrected and the diameter of the bone at the site of operation, the exact dimensions in millimetres of the base of the wedge to be removed to correct the deformity can be read off from the tables. I herewith present the first table, which gives the corrections for deformities from five to twenty-five degrees in extent in bones from five millimetres to twenty-five millimetres in diameter. Fifteen additional tables give the corrections for all possible deformities up to 100 degrees in extent in bones up to 100 mm. in diameter. It will therefore be seen that these tables give the correction for all possible deformities which the surgeon will ever be called upon to correct by operative means. No error exceeding .5 of a millimetre, or $\frac{1}{50}$ of an inch, it is believed, will be found in these tables.

* See "A New Method of Bone Surgery." Read before the Surgical Section of the Ninth International Medical Congress, Washington, D. C., Sep. 9, 1887.

"Cuneiform Osteotomy for Anterior Curvature of both Tibiæ and both Fibulæ; illustrating the great practical value of the Electro-Osteotomy as a bone-cutting instrument, and the Sphenometer as an instrument of precision in bone surgery; Suturing of the bones with kangaroo tendons; Hydronaphtholized surgical dressings; Bruce's Bowleg Brace." A Clinical Lecture delivered at the New York Post-Graduate Medical School and Hospital, October 19th and 26th, and December 18th, 1886. *The Therapeutic Gazette*, March and April, 1887.

PROF. MILTON JOSIAH ROBERTS' SPHENOMETRICAL TABLES.

DEFORMITIES, 5° TO 25° DIAMETERS, 5 MM. TO 25 MM.

Extent of Deformity in Degrees.		DIAMETER IN MILLIMETRES.																					Extent of Deformity in Degrees.	
		5					10					15					20					25		
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
5	5	.5	.5	.5	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	5	5
	5.5	.5	.5	5	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.5	2.5	5.5	
	6	.5	.5	.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1 5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5	2.5	6	
	6.5	.5	.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1 5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	2.5	3.0	6.5	
	7	.5	.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2 5	2.5	2.5	2.5	2.5	3.0	3.0	7	
	7.5	.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	3.0	3.0	3.0	3.5	7.5	
	8	.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2 5	3.0	3.0	3.0	3.0	3.5	3.5	8	
	8.5	.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5	3.5	3.5	8.5	
	9	1.0	1.0	1.0	1 5	1.5	1.5	2.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5	3.5	4.0	4.0	9	
	9.5	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5	3.5	4.0	4.0	4.0	9.5	
10	10	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5	2.5	2.5	3.0	3.0	3.0	3.5	3.5	3.5	4.0	4.0	4.0	4.5	10	10
	10 5	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3 5	3.5	3.5	4.0	4.0	4.0	4.5	4.5	10.5	
	11	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.5	2 5	2.5	3.0	3.0	3.5	3.5	3.5	4.0	4.0	4.0	4.5	4.5	5.0	11	
	11.5	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	4.5	5.0	5.0	11.5	
	12	1.0	1.5	1.5	1.5	2.0	2 0	2.5	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.0	4.5	4.5	5 0	5.0	5.0	12	
	12.5	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4 0	4.0	4.5	4.5	5.0	5.0	5 0	5.5	12 5	
	13	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	4.5	5.0	5.0	5.5	5.5	13	
	13.5	1.0	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3 5	3.5	4.0	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	6.0	13.5	
	14	1.0	1.5	1.5	2.0	2.0	2 5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	6.0	6.0	14	
	14.5	1.5	1.5	2.0	2 0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4 5	5.0	5.0	5.5	5.5	6.0	6.0	6.5	14.5	
15	15	1.5	1.5	2.0	2.0	2.5	2.5	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	6.0	6.5	6.5	15	15
	15.5	1.5	1.5	2.0	2 0	2.5	2.5	3.0	3.0	3.5	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	6.0	6.0	6.5	6.5	15.5	
	16	1.5	1.5	2.0	2.0	2.5	3·0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.5	5.5	6.0	6.0	6 5	6.5	7.0	16	
	16.5	1.5	1.5	2.0	2.5	2.5	3.0	3.0	3.5	4.0	4 0	4.5	4.5	5.0	5.0	5.5	6.0	6.0	6.5	6.5	7.0	7.0	16.5	
	17	1.5	2.0	2.0	2.5	2.5	3.0	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.5	5.5	6.0	6.0	6.5	7.0	7.0	7.5	17	
	17.5	1.5	2.0	2.0	2.5	2.5	3.0	3.5	3.5	4.0	4.5	4.5	5.0	5.0	5.5	6.0	6.0	6.5	6.5	7 0	7.5	7.5	17.5	
	18	1.5	2.0	2.0	2.5	3.0	3.0	3.5	4.0	4.0	4.5	4.5	5.0	5.5	5.5	6.0	6.5	6.5	7.0	7.0	7.5	8.0	18	
	18.5	1.5	2.0	2.0	2.5	3.0	3.0	3.5	4.0	4.0	4.5	5.0	5 0	5.5	6.0	6.0	6.5	6.5	7.0	7.5	7.5	8.0	18.5	
	19	1.5	2.0	2.5	2.5	3.0	3 5	3.5	4.0	4.5	4.5	5.0	5.5	5.5	6.0	6.5	6.5	7.0	7.5	7.5	8.0	8.5	19	
	19.5	1.5	2.0	2.5	2.5	3.0	3.5	3.5	4.0	4.5	4.5	5.0	5.5	6.0	6.0	6.5	7.0	7.0	7 5	8.0	8.0	8.5	19.5	
20	20	1.5	2.0	2.5	3.0	3.0	3.5	4.0	4.0	4.5	5.0	5.0	5.5	6.0	6.0	6.5	7.0	7.5	7.5	8.0	8.5	8.5	20	20
	20.5	2.0	2.0	2.5	3.0	3.0	3.5	4.0	4.5	4.5	5.0	5.5	5.5	6.0	6.5	7.0	7.0	7.5	8.0	8.0	8.5	9 0	20.5	
	21	2.0	2.0	2.5	3.0	3.5	3.5	4.0	4.5	4.5	5.0	5.5	6.0	6.0	6.5	7.0	7.5	7.5	8.0	8.5	8.5	9.0	21	
	21.5	2.0	2.0	2.5	3.0	3.5	3.5	4.0	4.5	5.0	5.0	5.5	6.0	6.5	6.5	7.0	7.5	8.0	8.5	8.5	9 0	9.5	21.5	
	22	2.0	2.5	2.5	3.0	3.5	4.0	4.0	4.5	5.0	5.5	5.5	6.0	6.5	7.0	7.5	7.5	8.0	8.5	9.0	9.0	9.5	22	
	22.5	2.0	2.5	2.5	3.0	3.5	4 0	4.5	4.5	5.0	5.5	6.0	6.0	6.5	7.0	7.5	8.0	8.0	8.5	9.0	9.5	10.0	22.5	
	23	2.0	2.5	3.0	3.0	8.5	4.0	4.5	5.0	5.0	5.5	6.0	6.5	7.0	7.0	7.5	8.0	8.5	9.0	9.0	9.5	10.0	23	
	23.5	2.0	2.5	3.0	3.5	3.5	4.0	4.5	5.0	5.5	5.5	6.0	6.5	7.0	7.5	7.5	8 0	8.5	9.0	9.5	10.0	10.0	23.5	
	24	2.0	2 5	3.0	3.5	3·5	4.0	4.5	5 0	5.5	6.0	6.0	6 5	7.0	7.5	8.0	8.5	8.5	9.0	9.5	10.0	10 5	24	
	24.5	2.0	2.5	3.0	3.5	4.0	4.0	4 5	5.0	5.5	6.0	6.5	7.0	7.0	7.5	8.0	8 5	9.0	9 5	10.0	10.0	10.5	24.5	
25	25	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.0	8.5	9.0	9.5	10.0	10.5	11.0	25	25
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		

Operations for the Correction of a Deformity Resulting from Local Disease.

CASE XVIII. Deformity resulting from anchylosis of the hip-joint, due to disease. The patient was a boy of eight years of age, who had recovered from hip joint disease, with anchylosis of the femur at an angle of 60 degrees from the normal. A longitudinal incision along the outer aspect of the thigh, just below the lesser trochanter, was made, and a cuneiform osteotomy performed, as indicated in *Fig.* 30, in which the dotted lines show

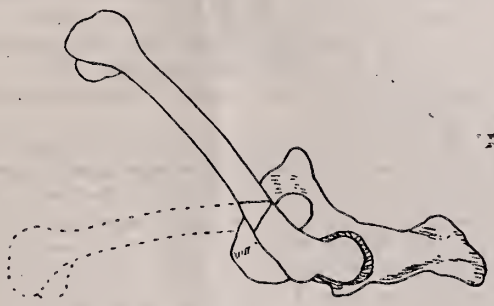

Fig. 30.

the position of the limb after the operation. In this case, appreciating the difficulty of applying a dressing which would secure apposition of the cut surfaces, the bones were maintained in apposition by means of silver sutures, which were left in the wound. The wound healed kindly, though there was slight superficial ulceration. The patient made a good recovery.

CASE XIX. Male, aged 10 years. Anchylosis of the hip, from disease, at an angle of 35 degrees from the normal. The incision through the soft parts was the same as in the previous case; but, instead of performing a cuneiform osteotomy, section of the femur was made below the great trochanter, by cutting half-way through the bone, first, from the anterior aspect of the bone, and next from its posterior aspect. It will be seen from

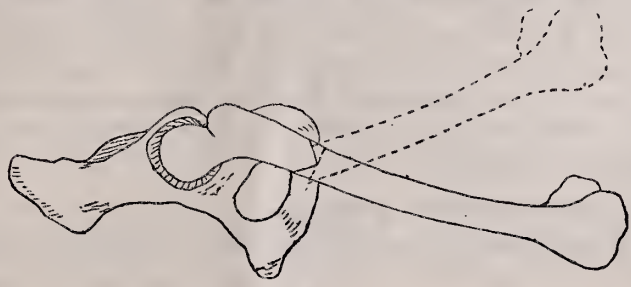

Fig. 31.

Fig. 31 that the cut ends of the proximal fragment would be wedge-shaped, the base of the wedges being continuous with the fragment; whereas, the distal fragment would have a wedge-shaped end, the apex of the wedge being continuous with the shaft. Having made such a section of the femur, the posterior lip of bone forming one side of the wedged-shape end of the distal fragment, was cut off at right angles to the axis of the shaft. This lip being out of the way, permitted the limb to be brought into position and one-half of the cut surfaces placed in apposition, the other half remaining gapped anteriorly, as will be seen from an examination of the figure. The fragments were secured in apposition in this position by means of strong wire sutures, and the patient placed upon an improvised or home-made cuirass. There was some superficial suppuration, but the union of the two fragments was complete and satisfactory.

Case XX. Male, aged 4 years, with knee joint anchylosed, the leg being flexed at an angle of 30 degrees from the normal. A semi-circular incision, over the condyles of the femur, was made, the patella dissected out, and a wedge-shaped piece of bone removed, the base of which was upon the extensor aspect of the limb. Three or four sections of the bone were necessary, before the amount of bone removed was sufficient to permit of the limb being brought into position. The cut surfaces were coaptated and secured in position by means of strong silver wire, and after applying the necessary antiseptic dressings, a fixation splint of gutta-percha was applied to retain the limb in position. There was considerable reaction following the operation, but the patient ultimately made a good recovery and had a useful limb.

Since performing the operations above reported, for deformity of anchylosed hip-joint, I have devised another new operation, which I think has several points of merit. This operation involves cutting through the capsule of the joint, and making section of the neck of the femur in a plane parallel to the mesial plane of the body, and in the line of the long axis of the femur. Having made this section, the limb is brought into the desired position by simply rotating the cut surfaces upon each other. No sutures are required in this operation, a firmly applied circumferential pelvic bandage being all that is necessary to keep the cut surfaces in apposition.

Operations for the Cure of Disease.

Removal of Diseased and Healthy Tissues.—Under this head, I have to report three cases of joint-excision. In these

operations, it will be remembered that not only is it necessary to remove the diseased tissue, but with it a very considerable amount of healthy tissue as well.

CASE XXI. Patient, female, aged 5 years. Hip joint disease of two years' duration. Marked emaciation of patient. Several sinuses about the hip, from which pus was freely discharging. The incision through the soft parts was begun a little in front of the mid point of an imaginary line drawn between the anterior superior spine of the ilium and the middle of the summit of the great trochanter.* Entering the knife at this point, the head of the bone was reached at the upper and anterior edge of the acetabulum, From thence a curvilinear incision, backward and downward, was made, and the knife made to pass over the summit of the great trochanter, at the junction of the middle with the posterior third of its antero-posterior diameter. From the summit of the great trochanter the incision was extended in a straight line dowu the shaft of the femur, to a point below the level of the lesser trochanter. All the tissues, including the capsular ligament, were divided down to the bone along the line of incision. Care, however, was taken not to cut through or wound the periosteum in any manner. Having made a clean cut down to the bone, the soft parts on either side of the bone were severed a little from their connections with the periosteum by means of a sharp scalpel. A pair of protecting retractors of the form illustrated in *Fig.* 1, were then introduced at this point, between the bone and the soft parts. When in position, they were pushed apart, and the bone was brought into position. The circular-saw blade of the electro-osteotome was brought into position, and a section of the shaft made at right angles to its axis. It should be borne in mind that in opening according to this method, the periosteum is not disturbed, but is cut directly through in the same plane as the bone.

Fig. 32.

The next step in the operation was the subperiosteal removal of the upper fragment or end of the femur. To accomplish this the periosteum was divided upon the bone in a line corresponding to the initial incision through the soft parts. Holding the end of the femur firmly within the grasp of a pair of bone forceps, the periosteum was deflected from the bone at either side by means of a periosteal elevator. In this way, the detached fragment was rapidly enucleated from its periosteal covering. The rapidity and ease with which the detached end of the femur may in this way be removed is truly surprising. The acetabular articular

*A Rapid and Easy Method of Excision of the Hip-joint. *New York Medical Journal*, April 16, 1887, page 435.

surface had been entirely destroyed. It was, therefore, necessary to thoroughly scrape this with a sharp instrument. Having done this and thoroughly cleansed the wound, a large sized rubber drainage tube was passed into it and down to the bottom of the acetabulum, and the wound closed by means of sutures. Primary union of the soft parts for about two-thirds of the extent of the incision took place. Through the opening left by the remaining one-third, pus was discharged for a considerable length of time. The discharge, however, finally ceased, and the patient at the end of four months was able to run about without any artificial assistance whatever. A range of mobility of about 40 degrees was obtained.

Case XXII. Patient male. aged 6½ years. Disease of the hip-joint of eight months duration. Symptoms aggravated; large extra capsular abscess; patient much emaciated. The extra capsuiar abscess in this case was opened and the cavity thoroughly cleansed before performing the operation of excision of the joint. This precaution, I think, it is always desirable to take; otherwise the pus from the abscess will flow over freshly severed tissues and cause unnecessary and unjustifiable risk of septic absorption. After having cleaned out the abscess, the operation was proceeded with as described in the last case. Though the wound was closed union of the soft parts did not occur by first intention, except at the upper margin of the incision. Healing was by granulation; suppuration continued for a period of two months, following the operation when the healing process was completed. Eight months after the operation I had the opportunity of examining the patient. He had gained in flesh and, in fact, was quite robust. The mobility of the joint, was, as far as flexion was concerned, fully equal to the normal, but it could not be extended, however, beyond a straight line. The amount of motion was truly remarkable.

Case XXIII. Patient, male, aged 3½ years. Knee-joint disease of eighteen months' duration. Patient much emaciated and in very delicate health. Knee-joint appeared of enormous size, being distended with pus. In order to get rid of the pus before opening the joint and running the risk of having pus flow over large areas of freshly divided tissues, I first aspirated the joint and washed it out thoroughly with a solution of carbolized water (1–20). Having done this, the usual curved incision through the soft parts, commencing on the internal condyle of the femur and passing forward just below the patella and upward to a corresponding point on the external condyle, was made. Upon turning the flap upward, the patella was found more than half destroyed by disease, and was therefore removed. Having divided the lateral and anterior articular ligaments, a single protecting retractor having a long curve was placed behind the condyles of the femur, and held in position by an assistant. The electro-osteotome was provided with a large sized circular saw, and with it a thin slice

of bone was removed from the distal articular end of the femur. This being removed, extensive destruction of the cancellous tissue of both condyles was found to exist. A thin section of bone was next removed from the articular end of the tibia. Again, extensive destructions of the cancellous tissue were observed. Removing the circular saw head-piece of the osteotome and replacing it with the head-piece for carrying drills and burrs, a large sized burr was placed in position, and with it the diseased cancellous tissue of the condyles of the femur and of the head of the tibia was excavated. The external layer of the compact bone which remained was so thin and fragile that it was not thought advisable to attempt to wire the freshened ends of the tibia and femur together. They were, however, placed in apposition, thorough drainage established, the wound closed, abundant antiseptic dressings applied and a guttapercha splint placed upon the limb to maintain it in position. The patient made an excellent recovery with complete bony coalescence of the ends of the tibia and femur.

Removal of Diseased Tissue Only.—Whenever possible, it is desirable to remove only the tissue diseased, or at least as little healthy tissue as possible. The following cases illustrate this method of operation;

Case XXIV. Female, 5 years of age. Patient had been limping for eight months, There was marked atrophy of the thigh-muscles, and some atrophy of the calf-muscles. Reflex muscular spasm was present, and voluntary control over the movements of the joint was considerably abridged. The contour of the joint, however, remained normal. There was no infusion of inflammatory products within the knee-joint cavity. Tenderness upon firm pressure was observed over the internal condyle. I made a diagnosis of central disease of the condyles of the femur, and decided to operate, with the idea of removing only the diseased area of tissue. Making an incision along the inner aspect of the knee over the condyle of the femur, and reflecting the soft parts, a half-inch trephine was placed in the tool-bearing head-piece of the osteotome, and a hole of this size made in the internal condyle at right angles to the femoral shaft. Through this opening small drills and burrs were operated by means of the electro-osteotome, and the diseased area of tissue entirely excavated. A miniature incandescent electric lamp was inserted through the opening, which rendered it possible to inspect the interior of the condyles. When the intra-condylar excavation had been completed, a large-sized drainage tube was introduced, and the wound in the soft parts closed about it. Antiseptic dressings were applied, and a posterior splint of guttapercha secured to the limb. Four days subsequently the dressings were removed, the cavity thoroughly washed out with a disinfecting solution, and the limb dressed as before. In the course of six weeks the en-

tire cavity had filled up, and there was only slight superficial suppuration. The patient made a good recovery.

CASE XXV. Male, 7 years of age. The history of the case was to the effect that the boy, while barefooted, had, several months previous to my seeing him, stepped upon a nail, which entered his heel. Upon examination, a sinus was found connecting with a carious os calcis. By means of a large-sized drill, the sinus was enlarged sufficiently to permit of the excavation through it of the interior of the os calcis. A drainage tube was introduced, antiseptic dressings applied, and the patient returned to his home. The result of this operation I am unable to state, as I never afterwards saw the patient or heard from him.

105 *Madison Avenue.*

ART. II.—**Medicated Wines.** (Vina Medicata,)* By LIEBIG COMPANY, of New York.

Synonyms, etc.—Vinum, Wine, *ὁ οἶνος*, Kolchisch: (guin!). Spiritus vini, Brandy; Vinum emeticum or stibiatum, emetic wine, wine of stibium. Vinum Campanum, campanense, champagne. Vinum Hispanicum, Spanish wine; Vinum Malacense, Mallaga wine. Vinum rubrum, Red wine. Vinum Rhennum, Rhine wine.

"Many and singular are the commodities of wine. It is the most pleasant of all liquors, and was made from the beginning to exhilarate the heart of man. It is a great increaser of the vital spirits, and a wonderful restorer of all powers and actions of the body. . . . . Immoderately taken, it destroyeth the life and prosperous health, disturbeth the reason, dulleth the understanding, confoundeth the memory, causeth the lethargie, palsie, trembling of the hands, and a general weakness of the sinews."† Wine is also spoken of as "that salutiferous liquor to the infirm and aged."‡

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*Presented to Medical Society of Virginia, Session October 18–21, 1887, in Richmond, Va.

† *Via recta ad Vitam Longam*, or a Plain Philosophical Demonstration of the Nature, Faculties and Effects of all Such Things as by Way of Nourishment, make for the Preservation of Health, etc. By Thomas Venner, Doctor of Physic in Bathe, 1638.

‡ *Willich on Diet and Regimen, 1789.*

The original intention of medicated wines was, that medicines which were to be continued for a length of time, might be taken in the most familiar and agreeable form.*

"The Pharmacopolia Officinalis" (London, 1769), contains formulæ for preparing Vinum arthriticum—wine against gout; Vinum Hippocraticum, Wine of Hippocrates—so called because it is supposed to be according to the prescription of Hippocrates; Vinum mirabile, the wonderful wine; Vinum chalybeatum, steel wine; Vinum stomachicum, stomach wine; Vinum amarum pro O Enopolis, bitter wine for vintners ("one glass, when the stomach has by debauch been palled or weakened, is of service by warming its fibres."). Vinum enulatum, Elecampagne wine; Vinum scorbuticum, wine against scurvy; Vinum hydropicum, wine against dropsy; Vinum ictericum, wine against the jaundice; Vinum millepedium, hog-lice wine (take hog-lice, a half pound, put them alive into two pounds of wine, etc.).

The "Edinburgh Dispensatory of 1794" gives formulæ for preparing wine of aloes, bitter wine (or compound wine of gentian), wine of antimony, wine of iron, wine of ipecacuanha, wine of rhubarb, tobacco wine ("a very useful remedy in the cure of dropsies and dysuries. From experiments, wine extracts the active principles of tobacco are better than any other menstruum"), and squill wine

The "United States Pharmacopæia" of recent date enumerates wine of aloes, wine of rhubarb, wine of tobacco, wine of antimony, wine of colchicum (root and seed), wine of ergot, wine of ipecac, wine of opium, wine of coca, etc.

Among the non-officinal wines are—Aromatic wine, wine of wild cherry bark, wine of tar (tar beer—Jew's beer), wine of pepsin, bitter wine of iron, wine of iron, wine of citrate of iron and quinine, etc.

Wine of ergot is, perhaps, used more than any other officinal preparation. It has no other fault than its proneness to decompose in hot weather.

The advantages of wine as a pharmaceutic menstruum are

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* *The Edinburgh Dispensatory, 1794.*

that, in consequence of the alcohol it contains, it dissolves substances insoluble in water, while at the same time, it is less stimulant than rectified or proof spirit (alcohol), both from its smaller proportion of alcohol, and from the modified state in which this fluid exists in its composition. The acid which it usually contains serves in some instances to increase its solvent power. "In the choice of wine, the purest and most generous should be selected. Sherry is directed by the United States and British Pharmacopœias—Teneriffe or Madeira should next be preferred." (*U. S. Dispensatory.*)

There are two kinds of wine officinal in the United States Pharmacopœia—Vinum xericum (the vinum album of the former Pharmacopœia), which is sherry wine, and vinum portense, which is port wine. The former contains about 20 per cent. of alcohol, and the latter about 26 per cent. In all the medicated wines which are officinal, sherry wine is directed as the menstruum.

This is a clear amber-colored liquid, having an agreeable pungent taste, and destitute of acidity. It possesses the advantage over either alcohol or diluted alcohol, of being less stimulating, and more agreeable in its taste, and the most beneficial in its effects on the system. The United States and British Pharmacopœias insist upon Spanish sherry as the menstruum in the preparation of medicated wine.

Druggists have again and again tried to make wine of colchicum, stibium, ipecac, etc., with some less expensive wine than Spanish sherry. Rhine wine, Catawba wine and other inexpensive wines were tried, but the results were unsatisfactory. The preparation could not be depended upon, owing to the greater or less continuance of precipitation. A good Spanish sherry is the only reliable menstruum, and especially so in the preparation of wine of tobacco or wine of coca. The brand of sherry known as "Imperial Crown" presents so many advantages for the preparation of medicated wines that we use it exclusively.

It requires some skill and experience to prepare reliable palatable and medicated wines. Dr. F. A. Castle ("Practice of Medicine") says of them: "Their more agreeable flavor is also a reason for their use."

There is still more or less of dispute as to the best formula for the preparation of coca wine. The red wines, such as Port, Bordeaux, Malaga, have been shown by experience to be untrustworthy, and by common consent, sherry is the officinal menstruum, as it is for all of the other medicated wines. Some are made by solution or admixture; others by maceration, and others by percolation. Some of them, such as the wines of ergot and coca, present special difficulties. The importance of a reliable wine of ergot is self-evident. Consequently the urgent necessity of care and skill. Coca wine presents so many intrinsic and extrinsic difficulties that some have been induced to substitute cocaine; but this practice has again been abandoned by conscientious manufacturers, not alone because of the unpleasant effects of the alkaloid, but also because it has been found that the alkaloid does not produce the same effects as the extract of the leaf.

Good coca is not plentiful. An expert recently obtained samples of leaves from twenty different importations. Every one of them was defective. All of them were adulterated by the admixture of the leaves of other varieties of coca, but which do not possess the virtues of the *erythroxylon coca.* It is well known that the leaves deteriorate more or less quickly. Much of what is sold will, on examination, be found to be in various stages of inertness.

There is also a class of medicinal wines having essence of meat as an ingredient. Says Letheby*: "What more invigorating remedy, what more powerfully acting panacea, than a portion of genuine extract of meat dissolved in a glass of Imperial wine? We cannot imagine a more fortunate preparation."

Our Coca Beef Tonic preparations come under this head. Coca Beef Tonic consists of essence of meat dissolved in Imperial Crown Sherry. Each fluid ounce represents the essence of two ounces of meat, ten grains of a guaranteed quality of coca, one-fourth of a grain of nux vomica and six

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**On Food.* By H. Letheby, M. B., M. A., Ph. D , &c., Professor of Chemistry in the College of the London Hospital, and Medical Officer of Health and Food Analyst for the City of London.

grains of calisaya. We prepare a number of combinations of the Coca Beef Tonic, the formulas of which have been already extensively advertised in the medical journals. They are to be had on request.

"The relation of alcohol to food," says Dr. F. A. Castle, "may be regarded favorably whenever it is necessary to improve the general tone of the system by increasing the appetite and the digestion and assimilation of food. Under such circumstances by the use of some one of the milder stimulants an increased relish is given to the food, and the stomach is better able to supply the necessary secretion, and the process of digestion is aided. But if strong liquors are used without first being properly diluted, the effects are to harden the food, to diminish the gastric secretion, and thus to impede digestion, and eventually to bring about a chronic inflammation of the stomach, rendering it unable to digest ordinary articles of food. In order to secure the benefit to be derived from the use of alcoholic beverages, it is evident that they should be taken during meals; and as the beers and light wines appear to stand at the head of alcohols * * we may venture to say that when judiciously used they will aid our food in nourishing the body, besides having the effect to retard waste of tissue, and in a measure to regulate the escape of animal heat."

Professor Austin Flint, in his masterly *Address on Fever*, delivered in General Session of the recent International Medical Congress at Washington, dwells at length on the use of alcohol in fever. Alcohol, he says, is a substance the toxic effects of which, taken in excess, are quickly and distinctly manifested; and there are few agents more prompt and decided in their influence in cases of disease.

We close these somewhat desultory remarks by requesting the honored and learned gentlemen of your Society to kindly apply any and every test to the Imperial Crown Sherry, which we are enabled to tender as an humble contribution to the hospitalities of your meeting.

We believe that manufacturers owe certain duties to the profession. Manufacturers of pharmaceutical preparations desire and solicit the good will of medical men. In return

it is their right to know what these preparations consist of. Not only this, but it is your right that only the best and purest materials be allowed to enter into their composition, and that a standard once announced shall be maintained as a matter of honor and good faith. Medicines are the physicians' tools. How important, therefore, that they should be reliable.

We submit these remarks with all due deference. We eagerly seek investigation. Since we began the manufacture of coca preparations, by dint of much effort and a great outlay of money, we finally succeeded in attracting the attention to them; but a horde of trash has sprung up.

Investigation will demonstrate certain facts, and as to these we cannot do better than to quote from an editorial in "Medical Classics":

"Manufacturers of legitimate pharmaceutical preparations frequently complain of the reluctance on the part of prominent medical men in giving testimonials, and with justice. If reputable physicians would take the trouble to thoroughly investigate the quality and merits of the products offered by honest manufacturers, and give these the stamp of approval, it would do much to kill off the horde of rascally compounders of trash, which springs up as soon as some reputable house has created a confidence in something, which they were, perhaps, the first to offer in a scientific and palatable form. On the other hand, it has not unfrequently happened that good faith has been violated by manufacturers. Preparations have not been maintained at the original high standard, or quack methods have been used to increase sales.

Per example take medicinal wines and tonics. A so-called coca wine, which is claimed to be a foreign product, is about as flagrant and contemptible an instance of violation of good faith as can be adduced. The manufacturers claim that it is made abroad. This is the first in the series of untruths. It is made here in New York. They claim that the menstruum is a superior quality of Bordeaux wine. This is the second falsehood. The wine used is a cheap and nasty California product, and for which they pay *fifty cents* a gallon. Then take the per centum of coca. That excellent chemist, Mr. Adolf Tscheppe, of this city, informs us that he has repeatedly analyzed this so-called foreign product,

and not once have the analyses given the per cent. of coca claimed.

The fact is, the original product was an honest one and its merits induced eminent foreign physicians to give it countenance. But certain it is, that if these knew of the fraud that is now perpetrated under cover of their names, the endorsements would not be allowed to remain for one instant. Why don't these various manufacturers come out squarely and openly, as the Liebig Company does, and say exactly what wine they use, where it comes from, and what it costs? In short, offer the proofs.

Under such conditions the honest article has a hard road to travel—unless medical men will take the trouble to investigate and then sustain that which has merit. The margin of profit in an honest article is of necessity small. On the other hand, the manufacturers of inferior goods have the advantage of having had a market created for such preparations by the original manufacturers, and having besides a far greater margin of profit, they reap the benefits. Under such circumstances, the honest manufacturer must (1) depend upon the sense of justice of the profession, or (2) come down from his high standard, or (3) give up the field.

"Nor can small manufacturers, or the generality of druggists, produce as satisfactory a preparation, no matter how honest they are. A large house will buy up some choice vintage, and, of course, at a price much below what the buyer of a barrel, or even of a dozen casks, has to pay. It buys up the best importations of the drugs needed, and the rest have to take the refuse."

Correspondence.

"Facts and Figures" about Chloroform Deaths.

Mr. Editor:—In a paper entitled "The Choice of General Anæsthetics in Surgery and Obstetrics," read by Dr. Hunter McGuire before the Medical Society of Virginia, and published in your journal for November, 1887, occurs the following: "Some of those who give ether, as bitterly and vehemently denounce the men who give chloroform. In the last text-book on surgery, issued this year, you will find the following: 'In general, there is no comparison between

these agents; ether is so much safer than chloroform, that the latter is fast disappearing in practice. The estimated death-rate of ether is 1 in 20,000; in chloroform, 1 in 3,000; seven deaths are sacrificed to chloroform to one of ether.'" Immediately following this quotation from my work on Surgery, Dr. McGuire asserts, "such statements are the outcome of prejudiced brains, and absolutely unwarranted by any facts or figures known to the profession."

It is a matter of regret to me that a paper, the general tone of which is so conservative, and which should rank as a valuable contribution to the subject of anæsthesia, should have its effect impaired by an attack upon myself, which I shall endeavor to show is unjust.

In the first place, I have never bitterly nor vehemently denounced any man or men for employing chloroform as a general anæsthetic in preference to ether. Nothing that I have ever written, or spoken in discussion, justifies Dr. McGuire in associating me with those who give ether, and "as bitterly and vehemently denounce the men who give chloroform."

As to the accusation that my "*statements are absolutely unwarranted by any facts or figures known to the profession,*" I wish to call the attention of your readers and the body of gentlemen to whom this address was made to the following authorities:—

On page 291, Vol. II., Agnew's *Surgery*, edition 1881, this great surgeon says:

"But it is not necessary to adduce experiments like the above, evincing the greater safety of ether over chloroform as an anæsthetic. We need only follow the cases of death arising from the use of chloroform, and recorded from time to time in the various medical journals. Up to 1869, there had been reported 210 deaths from chloroform. Dr. Baum, of this city, at my request has carried the record from 1869 to 1872, collecting 195 deaths from the same agent, making 405 fatal results of chloroform poisoning. During the same period of time, not more than 6 instances of death have been imputed to the use of ether, and in 3 of these the anæsthetic employed was a mixture of chloroform and ether, a fact which should entirely exclude them from the computation, as the *a priori* inference is that the ether had nothing to do with the

fatal result. Now, if to these 405 deaths from chloroform were added those which have never reached the publicity of the journals (and I doubt not almost every surgeon knows of such), the number would probably be swelled to at least half as many more.

"It seems to me that a surgeon who, in the face of such evidence, will continue to employ chloroform, assumes a tremendous responsibility. * * * No man has any right to jeopardize unnecessarily the life of a fellow-being. Chloroform, except in the few cases where ether fails to produce decided anæsthesia, should be banished from surgical practice.

On pages 548–9, Gross' *Surgery*, Vol. I., 1882, it is written:

"I have myself constantly used it [chloroform] ever since its introduction among us in 1848, believing it to possess decided advantages over ether, although its administration requires the greater care and attention. * * * The very odor of ether is to many persons excessively offensive, and there are very few in whom the inhalation does not produce more or less cough and vomiting. On the other hand, it certainly requires less caution in its administration, and *thus far it has furnished but few deaths, whereas the mortality from chloroform is already above three hundred.* * * * * Prof. Andrews, of Chicago, in 1870 collected from different American and European hospitals the statistics of 117,078 cases in which chloroform was administered, with 43 deaths, affording thus a ratio of mortality of 1 to 2,723. Of 92,815 obtained in a similar way, of etherization, only 4 perished, or 1 to 23,204."

Prof. Henry M. Lyman, in his able article on Anæsthetics and Anæsthesia, in the International Encyclopœdia of Surgery, Vol. I., page 423, after a thorough discussion of the various statistics submitted, concludes: "It is probable that the ratio fixed by Dr. Andrews (1 to 23,204), expresses very nearly the actual risk from ether inhalation."

Dr. Weir in a discussion before the New York Academy of Medicine, says:

"Statistics, imperfect in many ways, go strongly against chloroform. From 1873 to 1880 the collection of Roberts gives but 18 deaths from ether, obtained from all sources all over the world. In the same period were collected in a similar manner by Turnbull 92 cases of death from chloroform."

The International Encyclopœdia says, "Dr. Coles, of Virginia, reported on the basis of English statistics, the following figures: Ether, 4 deaths in 92,825 inhalations; ratio 1 to 23,204. Chloroform, 52 deaths in 152,260 inhalations; ratio 1 to 2,873." "Richardson collected from English hospital statistics, between the years 1838 and 1869 inclusive, a report of 35,165 administrations of chloroform with 11 deaths, ratio 1 to 3,196." "Rendle estimates in twenty of the principal London hospitals, chloroform is administered about 8,000 times each year, with a mortality of 3 per annum; ratio 1 to 2,666."

In the chapter on anæsthesia in my book, I based my statements on these and other sources of information as well as on personal experience. They are "*facts and figures known to the profession.*" JOHN A. WYETH, M. D.

267 *Madison Avenue, New York, N. Y.*, Nov. 23d, 1887.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Renal Syphilis.

We find in the *Gazette Médicale de Strasbourg* for October, 1887, an interesting communication from Dr. Ewg. Müller (of Dornach), headed, "Some Cases of Albuminous Nephritis Cured by Mercuay," from which we make some extracts. It is only very recently that Bright's disease, considered from the special point of view of its syphilitic origin, has become a favorite subject of investigation by pathologists. The literature of the subject, while not large, is valuable, for it is now possible to settle more definitely the relation existing between syphilis and albuminous nephritis. The latest work upon the subject, by Dr. Uegal (Inaugural Thesis, Paris, 1882) is especially interesting in its conclusions, which contain *en vélumé* the doctrine of renal syphilis, as held to-day. The first eight of these conclusions contain information indispensable to us, and are as follows:

"1. Syphilis may attack the kidney in all its stages. The same is true of hereditary syphilis.

"2. Of these renal complications, some are of early occurrence, others late. The former present themselves in the

early months of the disease, with all the characteristics of the infectious nephritis; and when the appearance of the chancre dates back several months, the clinical history of the renal disease resembles that of the cases of glomerulo-nephritis, observed in scarlatina.

"3. Syphilitic nephritis supervening during the second stage is always a grave complication; still it is curable; and not only so in acquired syphilis, but also in hereditary syphilis, Its gravity appears to be in proportion to the duration of the syphilitic disease, and the length of time the patient has been under specific treatment.

"4. Albuminuria being the symptom chiefly sought for in looking for renal manifestations, it may be understood that very often a specific nephritis may fail to be recognized in the face of the other symptoms of secondary syphilis.

"5. When œdema makes its appearance sufficiently to attract the attention of physician and patient, some other cause, more or less common, is assigned to it.

"6. The albuminuric patients are only benefited by the specific treatment; and when the other secondary symptoms have disappeared, they no longer think it necessary to take care of themselves, and consequently the renal lesion slowly runs its course, and if, later, these patients again come under the care of a physician, it is probable that some other cause than syphilis will be assigned, for the patient will not be likely to confess that he has had the disease. Then, when a patient presents himself with all the symptoms of an acute or chronic nephritis, and as the etiology generally adopted will be doubtful, it will be necessary to remember syphilis, and to institute, in consequence, the specific treatment. If the patient presents any signs of having had syphilis, the diagnosis will be confirmed.

"7. Early syphilitic albuminuria is generally persistent, lasting quite a long time. A question of extreme importance remains to be settled—and that is, whether secondary syphilitic nephritis, considered as cured, will return after a greater or lesser length of time. There are many reasons for believing that a certain number of cases of Bright's disease may be the reappearance of, or the termination of, the primitive disease of the kidney [early syphilitic nephritis], which has remained latent.

"8. The specific treatment gives the same results as in the other early symptoms of syphilis. The milk regimen should be considered as simply an adjuvant, but not as necessary."

From these conclusions it may be seen that there are, from the practical point of view, two varieties of cases of renal syphilis: The one which concomitant with albuminurious nephritis presents all the symptoms of secondary or tertiary syphilis, and is easy of diagnosis; the other, in which, with the exception of the nephritis, there exists no other symptoms by which the prior existence of syphilis can be established, and in consequence the diagnosis is doubtful.

Therapeutic experiment alone can settle this question. These cases obstinately resist a treatment apparently perfectly rational, but yield readily to anti-syphilitic medication. *Curationes ostendunt naturum morborsum.*

Dr. Müller next gives an account of eight cases of this category, and concludes with these deductions:

1. Renal syphilis is cured by mercurial medication.
2. There are cases of albuminous nephritis presenting no symptom of syphilis which are cured by mercurial treatment.
3. The result of this experimental therapeutics allows these to be classed among the manifestations of syphilitic diathesis.
4. Hepatic hyperæmia appears to be a frequent complication in cases of syphilitic nephritis.
5. Nephritis complicated with hepatic hyperæmia is not entirely cured by mercurial treatment.
6. The hepatic hyperæmia requires a special treatment, showing its existence to be independent of the syphilitic poisoning, and that it is, in consequence, primary.
7. The element of albuminuria is connected entirely as much with the existence of the nephritis as with that of the primary hepatic hyperæmia.
8. Those individuals who are attacked with renal syphilis have been syphilitics before becoming nephritics.

Treatment of Malignant Tumors with Arsenic. (*Munch. Med. Woch.* and *Rev. de Therap.*)

The effects of the arsenical preparations administered, especially by parenchymatous injection in cases of malignant tumors, unsuitable for operation, have been studied by Dr. Kobdl in the Surgical Clinic of the University of Tubingen. He has obtained absolutely no effect in epithelial carcinoma, while in some cases of general carcinoma he has had effects which are by no means to be despised. The author has collected fifty-nine cases of malignant lymphoma, the duration of which varied from one to ten years. The number

of these cases observed in men was double that observed in women. They had their seat upon the neck. Seventeen of these patients were cured in from one to six months, while in fourteen there was partial amelioration. It is necessary that the treatment should be continued for at least two months for the effects to begin to be produced. In nearly half the cases the treatment gave no result. The arsenic was given partly by the mouth, according to the following formulæ:

℞. Fowler's solution:
Tr. malate of iron.....āā gtt v. S. One dose.

Or better:

℞. Fowler's solution..... minims xv.
Tr. malate of iron.. .... ʒi. M.
S. 10 to 40 drops twice daily.

At the same time there were made injections of Fowler's solution, beginning with one divisionful of a Pravay syringe, and increasing to five. The remedy is stopped as soon as the first symptoms of poisoning are observed. In thirteen cases treated in this way, there were abscesses at the point of injection. In two, there was necrosis and elimination of the tumor.—*Le Praticien*, 26th Sept., 1887.

Simple Ulcer of the Œsophagus and Consecutive Contraction of that Organ.

Dr. Deboor reminded the Society (*Med. des Hospitaux*) that he had already reported two cases of contraction of œsophagus following ulcers of that organ. Dilatation was practised with success upon the patients in question. One is still alive. The other has just died; and the autopsy proved that he had had an ulcer of the œsophagus analagous to ulcer of the stomach. This man had been for some time in bad health, having a large abscess due to caries of the ribs and an axillary abscess. He succumbed quickly, with the symptoms of collapse and algidity, due to a perforation by an ulcer of the stomach.

Formerly this patient had had attacks of vomiting of blood, but it was thought that probably the blood came from the œsophagus; and at any rate, the ulcer of the stomach, if it existed, must have been cicatrized; for during the two years the patient was under observation he had no stomach troubles of any importance. The ulcer probably became latent and terminated suddenly by perforation

Autopsy showed the presence of gas and particles of food in the peritoneal cavity. The stomach was perforated. The perforation was situated upon the anterior face of the organ,

near the lesser curvature, and eight centimetres from the cardia. Upon the wall of the œsophagus, five centimetres from the cardia, there was a circular cicatrix, a half centimetre in breadth. At this point there was but little contraction, for it easily admitted the passage of the forefinger. This was undoubtedly due to the daily catheterisms practised for the last years. Above the contraction there existed an apparent dilatation of œsophagus.

Dr. Deboor considers this case a very important one, as it permitted him to affirm the existence of simple ulcer of the œsophagus giving place subsequently to a cicatrix and a contraction. This ulcer of the œsophagus is of the same nature as the ulcer of the stomach, as is shown by the existence of the two lesions in the same patient. We certainly cannot have here an *ulcus ex digestione;* for who can believe that the gastric juice will ascend in the œsophagus and corrode it at a distance of 5 centimetres above the cardia? Such ulcers lend no aid to the theory of ulcer of the stomach being caused by auto digestion. The ulcer has for its cause something specific. Traumations and loss of substance of the mucous membrane are not able to give rise to the round ulcer, either in men or animals, even under circumstances which appear singularly favorable to auto-digestion.

But, putting theory aside, Dr. Deboor concludes that simple ulcers of the œsophagus can exist and give place to cicatrices and contractions. It is important not to confound these contractions with those caused by epithelioma, for they can be cured by dilatation.—*Le Practicien*, 3 Sept., 1887.

Bicarbonate of Soda in Nocturnal Incontinence. (*Jour. Int. des Sec. Med.*)

Dr. Sell recommends as a remedy which has often proven successful for him in nocturnal incontinence of urine, bicarbonate of soda in teaspoonful doses at bedtime. He states that the patient is either completely cured or greatly benefitted.—*Le Practicien*, 3 Sept., 1887.

Solanine.

Solanine is a glucoside which has been extracted from the fresh sprouts of the potato, and for which virtues equal to or superior to those of morphine have been claimed. Under the direction of Dr. Dujardin-Beaumetz, Dr. Gaignard has made a clinical and experimental study of it at the Hospital Cochin, and the following are some of the conclusions he has reached regarding it:

Solanine is a glucoside which does not combine with acids

to form salts. Under the influence of acids it divides into *solanidine* and *glucose*. It is insoluble in water and but little soluble in alcohol, ether and oils. It is soluble only in strongly acidulated water. Solanine cannot be used hypodermically, its acid solutions being too caustic. Held in solution in any vehicle, it is caustic in itself.

It should be used in the form of pills of one and a half to three grains each.

A daily amount of from four and a half to six grains is very well borne by patients. Contrary to the opinion of authors who have used the substance, we think that it cannot be classed among the analgesics. Its high price, its irregularity of action, and the large doses required, do not permit us to advise its employment as an analgesic.—(*Bull Gen. de Therapeutique*)—*Le Practicien*, 10 Oct, 1887.

Analyses, Selections, etc.

[Prepared by WM. S. GORDON, M. D, Richmond, Va]

Conservative Surgery.

Dr. J. M. Taylor, of Corinth, Miss. (*Miss. Valley Med. Monthly*, Oct., 1887), concludes his article with four cases, illustrating his point. The *first* case was that of a compound comminuted fracture of the ankle-joint, the malleoli being broken off, the ligament ruptured, the end of the tibia driven into the ground, and the synovial fluid freely escaped. No shock and little bleeding, and nerves uninjured. The wound looked like a simple incision when the parts were approximated. The limb was elevated in a Day's double-inclined plane, and well adjusted. Cold water only used as a dressing. In a few days passive motion was begun. In five weeks the old lady had an almost perfect limb. The *second* case was a man whose forearm had been almost crushed off by machinery Both bones were broken about the middle, and there was great mutilation of the soft parts. As the main blood-vessels and nerves were uninjured, and the patient's constitution good, the writer decided to attempt to save the limb. The ends of the bones were sawed off, spiculæ removed, the pulpy mass of muscles cut away, and the arm placed in a board. Surgical fever reached 103° or 104°, with marked local disturbance. A satisfactory result was attributed largely to irrigation of the

wound. Flexion, extension, and rotation of the arm was almost perfect, with little atrophy, or impaired sensation. Some deformity and shortening resulted, and there was loss of the function of the principal digital flexor muscles. In the *third* case—lad of 11 years—a load of No. 5 shot was discharged into the thigh just below the trochanter major, slightly behind the median line, producing an oblique fracture of the femur. There was little bleeding, but great shock. The bone was split up four inches, and fragments protruded through the soft parts. Under ether, most of the shot were found beneath the glutei muscles. The expectant plan was adopted. Holes were bored in the bone with Branard's drills, and the ends united with silver wire. The first night one of the sutures broke from muscular contraction. Suppuration was profuse and offensive for several weeks. Cleanliness and bromo-chloralum were used. On the 18th day the double-inclined plane was exchanged for straight splints on either side of the limb, and extension was made. Debris was removed, and finally a thin sequestrum of bone, two inches long, was taken out, after which the wound closed. The pressure of the splints produced sloughs, but with intelligent nursing recovery followed at last. Two years afterwards there was fair motion of the joints, with two inches shortening. The sutures caused no trouble. There is inability to flex the knee freely, but this is getting better. The *fourth* case was a simple fracture of the humerus just above the condyles. The writer did not see the patient until two weeks afterwards, and did not know what had been done by the former physicians. He observed prostration, emaciation, hectic fever, colliquative sweats, and low delirium. Resection was chosen, as expectancy was out of the question. Two years have passed, and the arm is entirely healed, but without bony union. There is no atrophy nor loss of sensation, but all power of flexion, extension and rotation is wanting, and the hand can be used for knitting and sewing.

Dropsy of the Amnion.

Dr. R. W. Noble, of Barclay, Falls Co., Texas (*Miss. Val. Med. Monthly*, Oct., 1887), reports a case. From the large size of the woman's abdomen, twins were suspected. At the eighth month a large amount of the liquor amnii escaped, the night-glass being nearly full. Os dilated sufficiently to admit finger, but the membranes seemed intact. On two subsequent occasions, a pint or more of fluid was lost each

time before the labor occurred. When the membranes ruptured, the water came in a great gush, and in a still greater quantity after complete delivery. "The mother lay like a collapsed balloon." The child had been dead for some time. The placenta was of normal size, the cord being 20 inches long, and of a yellow, waxy appearance, while the membranes were much thicker than usual, and infiltrated with water. The cord was attached near the centre of the placenta. On one side of the membranes was a large pocket, the supposed obliterated remains of the cysts which broke before the labor. The woman was scrofulous and tuberculous, and at conception both parents were in bad health. The patient also had not menstruated for 18 months previous to the last conception. May not the dropsy have been due to these circumstances—the menstrual inactivity of the uterus having some especial influence in leading to degenerative changes?

Abdominal Section for Removal of Fœtus.

A paper of Dr. Wm. H. Wathen, of Louisville, Ky., read in the Section on Obstetrics, International Medical Congress, Sept., 1887 (published in *Nashville Journal of Medicine and Surgery*, and in the *South-Western Medical Gazette* for October.) The writer, on scientific and moral grounds, prefers abdominal section while the child is living. Statistics show that the danger to the mother is no greater from abdominal section than from embryotomy. If pelvic contraction be discovered during pregnancy, the induction of premature labor is indicated when the conjugate diameter is not less than 2.8 inches, the bi-parietal at seven months being 2.7 inches, which may be compressed .39 of an inch. With a conjugate diameter of less than 2.5 inches, premature labor should not be induced. Abdominal section should be done from election, and not as a last resort, and the operator in the future will have a mortality not exceeding ten per cent. Cæsarean section should not be done without suturing the uterine muscular walls, and using the sero-serous multiple suture. Occasionally, amputation of uterus or laparotomy will be preferable. Porro's operation, *performed easily*, is indicated in nearly all cases of uterine rupture, in some cases of uterine fibroma, or inflammation, in retention of tissue elements, in fatty degeneration due to malnutrition, or in cases of blood-poisoning substances. Statistics are given to justify the writer's conclusions.

Causes and Treatment of Barrenness.

Discussed by Thomas More-Haden, F. R. C. S., Ed., Dublin, Ireland (*Nash. Jour. of Med. and Surgery*, Oct., 1887), before the Gynaecological Section, International Congress. Cases of barrenness are divided into those in which sexual impotency, or some impediment from the vulvar orifice to the ovaria, was the cause; those of conceptive incapacity from deficiency, congenital or acquired, structural disease, arrested development, supra-involution of the uterus, or from analagous morbid conditions of its appendages; those of barrenness from constitutional causes; and those of which infecundity was apparently of moral origin, such as sexual inconguinity, etc. The most frequent cause is stenosis of the cervical canal. The writer claims superiority for a method in whieh the essential features are cutting and forcible expansion of the affected parts, followed by dilatation during cicatrization. Dr. S. C. Gordon, of Portland, Maine, believed that the fallopian tubes and ovaries had more to do with barrenness than stenosis of the cervix. Dr. Grailey Hewitt, of London, thought that good was done by the straightening—not the dilatation of the uterus. Dr. Lapthorn Smith, of Montreal, and Dr. Daniel T. Nelson, of Chicago, thought that abnormal conditions of the male generative organs were often the cause of infecundity.

Deformities of the Head and Neck

Mr. John H. Morgan, F. R. C. P., of London, discusses this subject (*Nashville Jour. Med. and Surg.*, Oct., 1887). The first in importance is meningocele. If a part of the cerebrum or cerebellum also protrudes, it is an encephalocele. If there is some of the membrane lining the ventricular cavity, the term is hydrocephalocele. These tumors, varying in size from a filbert to a dimension greater than the head, usually occur in the occipitol region. Over it the skin is covered with fine, long hairs, separating more widely with increase of tumor. The surface glistens, and ulceration takes place furthest from the circulation. Large blue veins cover the parts nearest the base, and converge towards the pedicle. Pressure on this tumor sometimes causes return of fluid. Crying or coughing may increase the tension of the tumor. The skin at the base is gathered into large folds, and especially when some of the fluid is drawn off, the marginal outlines of the hole can be detected. Interiorly, we find attached to the skin the expanded portion of the

dura mater, and to this the vascular arachnoid. The sacs are sometimes single, sometimes multiple, different sacs being caused by inflammation, which is the usual cause of death. The portion of brain included in an encephalocele may be a part of the cerebellum, but more frequently a part of one or both of the cerebral hemispheres. The opening between the cyst and cavity of the skull may close spontaneously. Except in rare instances, where compression can be used, the treatment is to leave the case alone, in the hope that the aperture may close.

Relations Between Changes in the Tissues and in the Shape of the Uterus.

Prof. Grailey Hewitt, of London (*Nash. Jour. of Med. and Surg.*, Oct., 1887), first describes a non-inflammatory softness of the uterus in girls at puberty, especially in those badly nourished. Dr. Charles D. Scudder has recently noticed this under the term mollities uteri. This condition plays an important part in leading to uterine flexions. Hardening occurs sooner or later, and the displacement becomes persistent. In a few cases this latter flexion may be due to persistence of a congenital condition, or may be due to want of growth at puberty, without softness. In multiparæ, an analagous condition is incomplete uterine involution, the tissues being soft and wanting in resistance. Slow flexions often originate under such circumstances. The author endorses Jacobi's belief that chronic uterine congestion is a result of defective menstrual involution, and that there is an analogy between this condition and puerperal subinvolution; also, that a general feebleness and want of force in the blood current is largely responsible for menstrual sub-involution. The writer considers endometritis as mostly due to congestive hypertrophy of the uterine lining, and to retained irritating secretions; and that, including gonorrhœal and syphilitic cases, the endometritis is secondary rather than primary. Acute congestion and hypertrophies have been clearly associated with ante-flexion, the congestion rapidly disappearing on reducing the displacement. Congestive hypertrophy of the os uteri is frequently observed in long-standing acute flexions. The atrophy of the uterine walls sometimes seen at the seat of the flexions, is mostly the result of long-standing compression of the unduly softened tissues. The atrophy keeps up the flexion.

Treatment of Fibroid Uterine Tumors.

A paper read at Washington, Sept., 1887, by Dr. Franklin H. Martin, of Chicago (*Nash. Jour. of Med. and Surg.*, Oct., 1887). He uses electricity in a manner which shows that varied effects are produced by currents varying in their nature and degree. Only two varieties of operations are recognized: (1), Positive intra-uterine galvanism, corresponding with Apostoli's caustique "positive galvano- caustique." (2), Negative intra-uterine galvanism, corresponding with Apostoli's "galvano-caustique negative." The advantages claimed for this method are as follows: It is entirely free from danger; is painless; always checks hæmorrhage; rapidly reduces the size of the tumor; alleviates neuralgic pain; and renders exact dosage possible.

Cæsarean Section—Sanger's Method.

Reported (*Nash. Jour. of Med. and Surg.*, Oct., 1887) by Prof. A. Gusserow, of Berlin. Patient, æt. 19, very short and rachitic. Menses appaared at 14; always irregular. Measurements, between spines of ilii, 24.5 cm.; crests, 25·5 cm.; trochanters, 30.0 cm.; external conjugate, 17.8 cm.; diagonal conjugate. 7.0 cm. Antisepsis was used. Uterus was surrounded below the child's head by a rubber tube. Incision from three finger-breadths below the processus zyphoideus to three or four finger-breadths above the symphysis pubis. Provisory sutures were placed through the abductors, but owing to vomiting the bowels protruded, and were retained by warm cloths. Uterus opened from fundus to the place where the peritoneum is movable, and sets loosely on the lower uterial segment. Much blood flowed, the placenta being in the line of incision. This was cut through, and the liquor amnii burst out. Hæmorrhage was controlled by drawing on the rubber tube. The child was mature, weighing 2,885 grams, and was 4.5 centimetres long. After loosening the piacenta and membrane, the cavity was strewn with iodoform. Incision was closed with eight silver wire sutures, which included the muscles without the decidua. Fifteen silk sutures penetrated the peritoneum only. The uterus was made to contract by sponges soaked in a hot sublimate solution. Iodoform was dusted over the line of suture, the uterus replaced, and the abdomen sutured. Highest temperature of patient was 100.5°F.; but the vomiting was considerable. In three weeks she left the bed, and the child lived. Prof Gusserow speaks very highly of Senger's method.

Tumors of Breast Treated by Electrolysis.

Dr. Alfred H. Garrett, of Boston, Mass, (*Nash. Jour. of Med. and Surg.*, Oct., 1887), spoke on this subject before the Gynæcological Section of the Cougress in Washington. The author considers that probably a majority of the tumors can be cured in the first stages by electricity. We cannot say that all these tumors are benign at the outset, but most of them seem to be so, from the success of electrical treatment. Out of one hundred and eighty-six tumors treated since 1864, one hundred and fifty-seven disappeared, and have so remained. Several left a small nodule, which either disappeared or remained benign. Two of these were removed by the scalpel, on account of inconvenience, and there was no recurrence, as far as could be ascertained.

Continuous Irrigation to Arrest Septic Inflection in Laparotomy, etc.

Dr. Wm. D. Haggard, Nashville, Tenn., has an article full of practical suggestion on this subject, in November No., 1887, of *Southern Practitioner.* The use of a continuous antiseptic current over the wounds in a uterus produced by enucleating a tumor was so markedly beneficial that he determined to resort to the plan—such as he had frequently used in external wounds—when he performed his next laparotomy.

June 11, 1887. Mulatto, age 20 years, mother of one child three years old, healthy appearance. But a few weeks before admission to hospital, a tender but non-fluctuating tumor began to develop in left posterior pelvis. A week later general health began to be noticeably affected, and the tumor had grown so rapidly as to extend into abdominal cavity. Laparotomy was performed. Hæmorrhage of an oozing character was profuse. Profound shock followed. Filled the abdominal cavity with sterilized hot water (about 105°) for the purpose of washing out the cavity and of stopping the oozing hæmorrhage and of overcoming the shock. The water was poured in until it came away comparatively clear; and then the wound was closed, with a drainage tube remaining in the cyst cavity, through which slightly discolored oozing was at times sucked out, and through which mercuric bichloride solution (1: 2000) was injected, and allowed to remain until it became discolored. The hot water poured into her abdomen undoubtedly relieved the shock. But on the third day, septic absorption symptoms set in decidedly. He at once fixed a spicket near the bottom of a four-gallon

tin bucket, with rubber hose and a long nozzle, which was inserted into the abdominal cavity, after removing the drainage tube. Water at temperature agreeable to the patient was then allowed to flow from a high elevation in a continuous stream. Soon the patient's extremities began to grow warm, and the circulation, etc., all improved. For the first two or three days an incredible amount of tissue shreds, clots of blood, pieces of membrane, etc., were washed out. As the discharged water became clearer, etc., the irrigation was used less continuously, but was kept up for twelve days; and by end of third week, the wound had nearly healed.

Was it Pulmonary Embolism?

Dr. A. J. Gray, Martin's Mills, Texas, reports (*Daniel's Tex. Med. Jour.*, Oct. 1887), the case of a young woman in the eigthth month of pregnancy. When first called in, March 26th, 1886, writer found her with severe pain in right side, due, probably, to pressure of the child on the diaphgram. Morphia gave relief. Since conception the patient had had several attacks of intermittent fever. There were pallor, with bloated face and extremeties, sore mouth, weakness, anorexia, and ulceration of cervix. Nitrate of silver was used on ulcers, and tonics and supporting food given. Patient was better the next day. On the 31st, at 1 o'clock, A. M., a natural delivery took place, the child being dead. All went well. At 4 o'clock the writer found the patient restless, anxious, and breathing heavily; pulse 120; temperature normal. Pulmonary obstruction diagnosed; whisky, carbonate of ammonia, and digitalis given. The suffering became worse, and after six hours of great agony, the patient died. The trouble probably began in the small arteries, extending towards the heart. The circumstances of the case favored the complication. The writer states that more attention should be paid to the blood-clotting, which may occur in remote portions of the body during labor.

Case of Pelvic Peritonitis and Metritis.

Reported (*Southwestern Med. Gazette*, Oct. 1887), by Dr. J. Allen Shirley, of Winchester, Ky. Patient, æt. 36, was delivered of her seventh child August 30, 1885. Labor protracted and unusually painful. For two months no exercise had been taken on account of pelvic and abdominal pain. Hæmorrhage two hours after labor yielded to removal

of clots with pressure and ergot. Temperature next morning 99°; pulse 80; abdomen tender. Morphia given to control after-pains. September 1st, patient had a chill; temperature 102°; pulse 110; abdomen tender and tympenitic, no abnormality in pelvis except suppression of lochia. Diagnosis was abdominal peritonitis; turpentine stupes, morphia, and vaginal injections used. September 4th, abdominal symptoms gone, except a little swelling; temperature and pulse normal. In twenty-four hours another chill; temperature 105°; pulse 120; no tenderness or tympanites; vagina hot and tender; pelvic abdomen not hard. Diagnosis, pelvic peritonitis. Treatment with hot carbolic solution (gtt. xx.—qt. i.) with the now scanty lochia; five grains of quinia every four hours to cinchonism. Convalescence beginning September 8th. On the 10th another chill; os fixed and patulous; lochia very fetid; temperature 104°; pulse 120; no tenderness or tympanites. Diagnosis, metritis. cinchonism kept up; carbolic acid (ʒss—qt. i.), every three hours. On the 14th, temperature 100°; pulse 90. Fly blister over fundus, which was then two inches above pelvis. By September 18th permanent recovery. The writer is convinced that all three diagnoses' were correct. Malaria had no influence.

Complete Occlusion of Œsophagus by a Piece of Meat Relieved by Trypsin.

Drs. W. H. Bobbitt and K. P. Battle, Jr., of Raleigh, N. C., report this case (*N. C. Med. Jour.*, Oct., 1887). A boy, æt. three years, had for eighteen months suffered with œsophageal stricture, caused by drinking lye. While eating lean ham, he choked, and could swallow nothing afterwards. There was much suffering from thirst, as water returned through the mouth and nose. No bougies being at hand, a No. 12 E. rubber catheter was used in vain. Smaller ones failed. Mackenzie's œsophageal forceps met the obstruction, the point being felt in the depression just above the manubrium. Small shreds of ham fibre were brought away, but repeated efforts failed to remove the mass, and the exhaustion of the patient forbade further procedures. Apomorphia was contra-indicated. All means failing, the trypsin mixture of Fairchild Brothers & Foster, was used by local applications, and in teaspoonful doses every hour. Forty-eight hours after the impaction, water passed the stricture, and vomiting of meat fibre followed. This treatment was suggested by the report of a case by Mackenzie, in

which pepsin was thought to have digested an impaction in the gullet.

Practical Thoughts on Some Common Forms of Uterine Disease.

Dr. J. D. Smith, of Paducah, Ky., says (*South-West Med. Gaz.*, Nov., 1887) that uterine displacements, cervical endometritis, vaginitis and pelvic cellulitis are generally presented together, and hence none of them can be therapeutically ignored in seeking the recovery in any given case. In proportion to the displacement of the uterus, the circulation becomes obstructed; hyperæmia follows; long continued hyperæmia results in hypertrophy; and unrelieved hypertrophy, sooner or later, leads to atrophy. Whenever the fundus passes a vertical position backward, either with or without prolapsus, it is pathological, and tends to constant aggravation; and in such cases of long standing, objective changes are generally great as compared with subjective symptoms.

When these displacements are due to causes acting through the general system—as lifting, tight lacing, etc.—and are of recent origin, or have not been aggravated by long continued sexual indulgence, or even, in not a few instances, where the cause has acted directly upon the uterus—as in abortion, engorgement from suppressed menstruation, etc.—they may often be relieved by a properly fitting pessary applied at once. But in many instances it is necessary first to resort to preparatory treatment.

In the few cases of anterior displacements that require such preparatory treatment, simply elevating the fundus and drawing forward the cervix every four or five days, with daily hot vaginal douche, will shortly make the parts tolerate Thomas' modification of Cutter's anteversion pessary —the best pessary for this error of position.

But in posterior displacements, roll up inside of each of three pieces of absorbent cotton a drachm of impalpable powder of boracic acid. With the fingers carry cervix back toward the hollow of the sacrum, and hold in that position for a few minutes. Through speculum pass in one piece of the rolled cotton (about hen-egg size) well up behind the cervix, so as to take the place of the dislocated fundus; place another piece in front of it; and place the third piece in the vagina, so as to support the other two. Let patient assume knee-breast position twice daily, and with her index-finger press the cotton upward and backward. In about 3,

5, or 7 days, as required, remove the cotton, use hot water douche, and return for renewal of tampons. If there is much vaginitis with free discharge, throw ʒj–ij boracic-acid powder into the vagina before tamponing. This general treatment should be kept up from two to six weeks—until the operator can carry the cervix, without special pain, far enough backward toward the sacrum to decidedly antevert the fundus. This can be done only after the contraction of the anterior vaginal wall and utero-cervical ligameat has been overcome; and then all that a permanent pessary has to do is to hold the vagina at its full length. The Doctor's maxim is *never* introduce an unyielding pessary until the dislocated uterus has been, or can be, by moderate effort, completely reduced, and then introduce it simply to prevent its return.

Hodge's pessary acts upon the principle of a lever, with the pubic arch as a fulcrum; Thomas' modification of it acts upon the principle of a wedge, or the keystone of an arch held in position by the contractility of the vagina. Hence *Hodge's pessary* is equal in width at both ends. Its posterior long curve adapts itself to the long, sweeping curve of the upper posterior vaginal wall—its upper end, with its rounded corners, fitting up snugly in the posterior cul-de-sac of the vagina, and there forming a pivot on which swings the posterior utero-vaginal junction. Its anterior very slight curve fits snugly under the anterior vaginal wall, with the angular but rounded corners resting behind the pubic arch, which serves as a fulcrum upon which the leverage of the instrument acts. The cross-bar in front is intended anteriorily to make room for the urethra. The upper posterior portion of *Thomas' modification* is the same as the Hodge pessary, and adapts itself to the same parts in the same way. But it narrows to the front, becomes wedge-shaped, and has the decided double curve so objectionable in the Hodge pessary, which throws its narrow front end *under* instead of behind the pubic arch. Hence Thomas' modification depends, for its supporting power, upon the contractility of the vagina, peritoneum, and vulva.

Strangulated Hernia.

Dr. W. E. Webb, of Bryantsville, Ky., advises (*Sth-West. Med. Gaz*, Nov., 1887), as soon as reaching a patient with strangulated hernia, no matter in what form or condition, give a full hypodermic dose of morphia and atropia. Under the deep narcosis thus produced, the strangulating bands

are often relaxed, and the hernia relieved. In suitable cases, while the morphia is still acting, cut down upon the deformity, return the sac to the cavity, and obliterate the cleft by appropriate suturing, or by injection of carbolic acid, or other like substance. If the patient is young and healthy, the hernia, recent, tense, painful to the touch, with the abdomen hard, and either retracted or distended, and tympanitic, prompt operation is the remedy. But in the aged, when the hernia is large and old. when, if a truss has not been worn, the parts have had time to accommodate themselves to the abnormal state, or when a truss has been worn, and a large mass suddenly protrudes, when handling gives but little pain, other measures may have a fair trial before operating.

Two Cases of Liver Abscess—Death After Aspiration.

Dr. M. Collins, Louisville, Ky., reports the cases (*Sth. Western Med. Gaz.*, Nov., 1887) to show that the aspirator should be used promptly after a diagnosis is made. In *Case I*, the hypodermic syringe was inserted full length into the tumor, and nothing obtained except a drop of thick yellow matter, which the microscope revealed to be only epithelium and a few oil globules (pus). A few minutes later, the patient fell into shock, with cold sweat, cold feet, and cold hands, and temperature fell to 96°. Hot bottles and stimulants soon revived him. Two days later, he had repetition of the same symptoms, and recovered. Three days later, he had another attack of shock, and on the next day he died suddenly. Post-mortem shows the abscess had burst into the peritoneum. Had the aspirator, instead of a hypodermic syringe needle, been used, the fluid pus would have been removed. The second case would probably not have proved fatal had the aspirator been used in time.

Operation for Strangulated Hernia.

Dr. A. N. Denton, of Travis county, mentions (*Daniel's Tex. Med. Jour.*, Oct., 1887), the case of an inmate of the State Lunatic Asylum who, for some years, had been troubled with direct inguinal hernia. She was in feeble health and much emaciated. Strangulation set in. The usual efforts for reduction were unsuccessful At the last moment, when life seemed to be almost extinct, the operation was performed, with immediate relief of the symptoms. The case is reported in order to prove the value of surgery in apparently hopeless cases.

Maternal Impressions on the Fœtus.

Dr. T. B. Greenley, of West Point, Ky., (*Amer. Prac. and News*, Oct., 1887), read an article on this subject before the Hardin county Medical Society. After stating that the views held by observers differ widely, he cites eight cases under his own observation, and a number of cases from high authorities, to prove that the fœtus may bear marks traceable to impressions upon the mother's mind. The different theories regarding the connections between parent and child are given, the most general oue being that of W. Hunter, who held that the placenta has a maternal and a fœtal part, two separate circulatory systems being produced. The writer believes that the results are of mental origin, and that various pathological conditions in the fœtus may be due to direct impressions upon the mother's mind, produced by her witnessing the morbid conditions under which the husband is laboring.

A Posological Study.

In an article by Dr. Charles W. Murphey, of Salem, Ind. (*Amer. Prac. and News*, Oct., 1887), read before the Washington county Medical Society, he refers to the importance of considering, not only age and sex in dosage, but temperament, idiosyncracy, and the complications and stage of the disease existing. Tincture of cantharides, for instance, which, in ten or twenty drop doses produces strangury or urethral irritation, will allay irritation of the prostatic urethra and neck of the bladder in doses of one drop or less. Aloes in large doses will cause hæmorrhoids; in small doses will alleviate the same condition. Calomel is shown to exert influences varying according to the amount given. Potassium bromide may have to be used in doses of a hundred grains to prove efficient. Ten or twelve grains of bismuth every three hours, is sometimes given by Dr. J. Lewis Smith, of New York, to children a year old. Electricity, arsenic, and strychnia may be required in large doses, while three drops of a solution of one grain of podophyllin in one drachm of alcohol, often does well in the constipation of children with clay-colored stools. In intermittents it is best to give quinia in one or two large doses four or six hours before the expected paroxysm.

Pulmonary Tuberculosis.

Dr. Wellford H. Morse, of Westfield, N. J., considers the therapeutics in this disease, confining himself particularly

to the effects of four remedies. Cod-liver oil, only as an adjuvant to the hyphosphites, produces or preserves healthy tissue. The hypophosphits furnish to the tissues phosphorous, the bacillus not living where this element is present. Gaseous enemata control suppuration and give the lesions an opportunity to undergo cicatrization. The parenchymatous injections of the salts of lime causes calcification and cicatrization of the lesions. The hypophosphites lead in treatment; the salts of lime and soda being practically the only efficient ones. Bergeon's method fulfills the theory upon which it is based, and Kolischer's method of supplying salts of lime is perfect in theory, and promises good.

Urethral and Prostatic Disorders.

Dr. Henry Orendorf, of Louisville, Ky., (*Progxess*, Oct., 1887), read a paper on this subject before the last meeting of the Mississippi Valley Medical Association. As causes of urethral contractions, with prostatic disturbances, he gives: Congenital causes, excessive masturbation, urethritis, chemical traumatism. The writer operates altogether by division, claiming that other methods, electrolysis included, are unsatisfactory. Cocaine is used in all cases, and is believed to be a perfect anæsthetic and good hæmostatic. It is claimed that hæmorrhage and pain are no longer factors to be considered in the division of strictures.

Sexual Relations as Causes of Uterine Disorders.

Is the heading of a timely and important article by Dr. Wm. Goodell, of Philadelphia, in *Progress*, for October, 1887. The writer first speaks of the effect upon the female genital organs of the nervous erethism of long engagements. The love between man and woman is not merely an intellectual process, and the ante-nuptial relations sanctioned by custom in this country are the sources of diseases of which it is the duty of the physician to ascertain the cause and apply the remedy. The excessess of the honeymoon trip are not to be deprecated. Counsel should be given regarding unmastered sexual excitement, while criminal abortion must be denounced. Scriptural and other authority are quoted to prove the sin of preventing conception, and a case is given, illustrating the harm resulting from intentional incomplete coitus. The various advantages of carrying out honorably, yet fully, the command to be "fruitful and multiply," and the serious mental and physical effects produced by any effort to baffle the laws of God, are pointed out in a manner that cannot fail to impress the reader.

Electro-Magnetism in Ophthalmic Surgery; with Cases.

Dr. A. G. Sinclair, of Memphis, Tenn., says (*Miss. Valley Med. Monthly*, Nov., 1887), since Dr. McKeown, of Belfast, made his publications in 1874, the magnet has been considered a valuable agent in ophthalmology. McKeown employed the simple bar magnet, but now the electro-magnet is used, as it is much more powerful, and admits of the use of extremities much more slender, and therefore better adapted for introduction into the eye-ball. Besides, the electro-magnet admits of being magnetized only at the moment it is so needed. The polar extensions being detachable, a broader surface and more powerful tractive force can be employed at will, or an extension adapted to the case in hand substituted. This magnet is useful not only in removing fragments of steel or iron from the superficial structures, but also from the interior of the eye. Foreign bodies in the cornea, however, as also in the firmer interior structures, as the iris, retina, crystalline lens, etc., are generally so firmly imbedded as to require the scoop, spud or other instrument; but where the resistance is mostly that offered by the vitreous, which is easily broken up, or the aqueous humor, the magnet renders the removal of visible particles almost certain, while the removal of even those that cannot be seen can generally be effected by a skillful operator. The advantage of searching in the interior of an eye-ball with an instrument which will attract foreign bodies and hold them while the instrument is being withdrawn is apparent.

The electro-magnet applicable to eye work is not one of great power; hence it is necessary to make a passage for this magnet up to, or very close to, the object to be removed. Even the coating of lymph will materially interfere with the influence of the magnet. Unless the original wound is amply open to prevent the brushing off of the foreign body from the magnet, make a new passage through the cornea or sclerotica at a point through which the body can be most easily reached. Except where the foreign substance is very small it is best to make a **T** incision. Close the scleral wound with sutures; otherwise before making it, a flap of conjunctiva should be dissected up in such a manner as to form a cover for the scleral incision, in which case sutures in the conjunctiva will be sufficient. The magnet is useful also in diagnosis, as when a particle is seen in the eye, but its nature is uncertain, or in a case of a similarly situated mass of lymph which may contain a piece of iron or steel. If a powerful magnet is placed near such objects, if they be

metal, they will move towards the magnet. A suspended magnet placed near an eye-ball which contains an invisible piece of iron or steel, will also cause the magnet to move towards it, and thus prove that a piece of steel or iron is in the eye-ball. He then reports two cases illustrating the value of the magnet in eye surgery.

Treatment of Dysentery in Texas.

The Texas Courier-Record of Medicine gives in its November number, 1887, a number of responses to letters sent out to the "leading physicians of Texas," asking for their treatment of dysentery.

Dr. C. H. Wilkinson, of Galveston, says the following is a most excellent remedy in the usual forms of dysentery seen in his city:

℞—Morph. sulphate.....gr. $\frac{1}{3}$
Saturat. solut. hydronaphthol.....℥ j

M. S.: Inject three or four times a day as needed.

The ipecac plan has not proved satisfactory in his hands.

Dr. T. C. Osborne, of Cleburne, after many years of familiarity with dysentery, cleanses the intestinal canal, and then gives at bed-time, to adults; Ipecac powder, ℈j, wetted with laudanum, ʒj., and just enough water to make the dose easily swallowed, and then remains two hours with the patient to prevent him drinking any water. Repeat at end of 24 hours, *if needed.* Rarely requires more than the third repetition. If there is much hæmorrhage, he relies on ergotine rather than astringents.

Dr. F. B. Kingley, of San Antonio, has found cocaine alone or with other remedies useful. He has no routine.

Dr. S. Eagon, of Dallas, first evacuates the bowels with calomel, gr. ij., and then Rochelle salts; and then relies on the opium—doses and preparations to suit the patient. Ipecac treatment is sometimes effective, but as a rule is not well tolerated, even when associated with an opiate.

Dr. E. H. Ward, of Waxahachie, gives hypodermic injection over the stomach. In half an hour, administer full dose of ipecac—say ʒss. But this treatment is of little value beyond the early stage. Later on, he gives copious enemata of hot water, followed by 25 per cent. solution, in hot water, of fluid extract of hydrastis. After injections, opium suppository. Cocaine over stomach helps to relieve irritable stomach, etc.

Dr. A. C. Graham, of Dallas, in acute cases, after Rochelle salts, alternates with Batley's sedative and camphor

waters. When tongue is much coated, give small doses calomel; ipecac if needed. When becoming chronic, give small doses of corrosive sublimate or large doses of French bismuth.

Dr. John Rodman, of Abeline, says when the disease tends to chronicity, he combines aromatic sulphuric acid with Epsom salts—small doses.

Evisceration for Impacted Shoulder Presentation.

Dr. J. A. Faison, of Mt. Olive, N. C., reports an interesting case (*N. C. Med. Jour.*, Nov., 1887). The shoulder and chest were immovably jammed in the pelvis when the Doctor arrived. Fœtus was dead. A modified Nægle's perforater was passed into the chest, after amputating a protruding arm, and evisceration performed by piece-meal. Uterine contractions then brought down the mass, and the spinal cord and entire body was divided. The crotchet was used to help deliver one half of the divided body, after which the womb, by its own aetion, expelled the other half. Afterwards, the placenta was expelled by expression. Antiseptic treatment was adopted. Temperature of mother never exceeded 100.5°, and she soon got well.

Health Status of South American Ports.

Dr. W. Wunderlich, of New Orleans, reports (*Miss. Valley Med. Monthly*, Nov., 1887), to the Louisiana Board of Health the health status of several Central American ports in communication with New Orleans; especially Belize, the capital of British Honduras, and Livingston, the Carribbean port of Guatemala, where they have yellow fever outbreaks. The inefficiency of the quarantine regulations at these places, where yellow fever may be said to have a residence, makes him advise his State Board to keep up strict quarantine about New Orleans against these ports.

Analyses of North Carolina Wines.

F. P. Venable, Ph. D., F. C. S., and W. B. Phillips, Ph. D., give analyses of 19 different native wines, in the *North Carolina Medical Journal, November*, 1887. It is a tabular paper, and hence not open to abbreviation or synopses.

Man as an Object of Zoology.

Is a continued article by Dr. S. W. Stiles, of Georgia, in the *Southern Medical Record*, November, 1887, which describes the features characteristic of the five different races of man.

Case of Insolation—Cold Air Treatment.

Dr. W. J. McCrann, of Louisville, Ky., reports the case (*South-Western Med. Gazette*, Nov., 1887), which occurred last July 31st. Temperature rose in a few hours to 107¾°. As a more convenient place for the night, the patient was moved to a vault in a brewing establishment across the street, where the temperature was 40°. In an hour the patient's temperature dropped to 102.5°. As the patient was so much better, he was removed from the vault, but in 30 minutes the thermometer ran up to 103.5°. He was returned to the vault for forty minutes, and the temperature was again lowered to 102°, and he got well enough to return to work in a month or so. The case illustrates the sedative effects of cold air by inhalation, for it did more good in sixty minutes than six hours of assiduous medical treatment.

Erysipelas in Infant Three Weeks Old—Recovery.

Dr. T. B. Greenley, of West Point, Ky., records the case (*South-Western Medical Gazette*, Nov., 1887), as the first one he had met in an infant under a year old during his forty-three years of active practice. Cause unknown.

Monthly Examinations in Schools.

Dr. James Orr, of Terrell, Tex., rightly condemns (*Tex. Cour. Rec. Med.*, Nov., 1887), the system of anything like weekly examinations in writing, as adopted by some of the schools of his State, since they are liable to work serious injury to the health of children by over-exciting them in making frequent preparations, etc., for them.

Persistent Headache and Vertigo Occurring at the Menopause—Paralysis—Death.

Dr. C. O. Matthews, of Dangerfield, Tex., reports the case (*Tex. Cour. Rec. Med.*, Nov., 1887), in which no treatment seemed to be of benefit.

Electricity in Disease.

Dr. F. T. Paine, of Comanche, Texas, (*Daniel's Tew. Med. Jour.*, Oct., 1887), claims that in certain affections, such as acute and chronic rheumatism, diseases of females, etc., the painful parts are perfectly insensible to the electric current. If established, Dr. Paine's experiments will add a new value to the use of electricity.

Utero-Ovarian Insanity.

Dr. S. B. W. Nowlin, of Nashville, Tenn., gives a full review article on this subject in *Southern Practitioner*, November, 1887, proving that a large number of cases of insanity are due to utero-ovarian troubles, such as traumatic displacements, or perversion of function. etc.

Traumatic Sympathetic Ophthalmia.

The well written paper on this subject, by Dr. Joe Howell Wray, of Waynesville, N. C., in the November No., 1887, of the *North Carolina Medical Journal*, gives, however, no new suggestion as to this distressing condition. It is a good paper for the student to read.

Book Notices.

A Manual of the Physical Diagnosis of Thoracic Diseases. By E. DARWIN HUDSON, Jr., A. M., M. D. late Professor of General Medicine and Diseases of the Chest in the New York Polyclinic; Physician to Bellevue Hospital, etc. One Volume. 162 pages. Nearly 100 Illustrations. Muslin. Price, $1.50. New York: William Wood & Company. 1887,

The author of this "Manual" died suddenly, just as he had completed his manuscript. Dr. Laurence Johnson was selected to revise the proofs, etc. He has done his work with ability. The work itself is a practical one, and is useful to practitioners generally. Chapters VI. and VIII. are specially valuable, as giving in tabular form synopses of lung and of heart symptoms respectively.

Insanity: Its Classification, Diagnosis and Treatment. By E. C. SPITZKA, M. D., President New York Neurological Society, etc. New York: E. B. Treat. 1887. Demi 8vo. Pp. 423. Price, $2.75. (From Publisher.)

This second edition is a thorough revision of the former edition, and contains much new matter, which makes the "Manual" the more useful to students and practitioners. In fact, simply as a text-book for the college, it is the best one published. We might differ as to some of the opinions expressed by the author, as, for instance, in regard to the definition of "moral insanity." But in every instance where there are well defined grounds for differences, the author states his own views with sufficient diffidence not to force

the reader to adopt them. The entire teaching is practical and reliable.

Manual of Organic Materia Medica. By JOSEPH M. MAISCH, Phar. D., Professor of Materia Medica and Botany, Philadelphia College of Pharmacy. Third edition. With 257 Illustrations. Philadelphia: Lea Brothers & Company. 1887. 12mo. Pp. 532. (From Publishers.).

The simple announcement that the Third Edition of this "guide to materia medica of the vegetable and animal kingdoms, for the use of students, druggists, pharmacists and physicians" is ready, should be sufficient, it would seem, to induce all in search of a book, such as the title indicates this to be, to purchase this "Manual" at once. It is *the* recognized authority.

Anatomy: Descriptive and Surgical. By HENRY GRAY, F. R. S., F. R. C. S., Lecturer on Anatomy, St. George's Hospital Medical School. *Drawings* by H. V. CARTER, M. D., late Demonstrator of Anatomy at St. George's Hospital. With Additional Drawings in Later Editions. Edited by T. PICKERING PICK, Surgeon to, and Lecturer on Surgery at St. George's Hospital, etc. *A New American from the Eleventh English Edition.* Thoroughly Revised and Re-Edited by WILLIAM W. KEEN, M. D. Professor of Surgery in the Woman's Medical College of Pennsylvania, etc. To which is added *Landmarks—Medical and Surgical*—by LUTHER HOLDEN, F. R. C. S., with additions by WM. W. KEEN, M. D. Philadelphia: Lea Brothers & Company. 1887. Imperial 8vo. Pp 1,100. Cloth, $6; with Veins, Arteries and Nerves in colors, $7.25; Leather, $7; in colors, $8.25; Half Russia, raised bands, $7.50; in colors, $8.75. (From Publishers)

We have given the full title of this new edition of "Gray's Anatomy," with "Holden's Landmarks" appended, simply to say that every promise of the Publishers in their widely distributed prospectus, or announcement, has been faithfully kept. A carefully prepared chapter on Cerebral Localization and Topography has been added to the American edition, which is of very great value. Errors of text and of illustrations in all former editions have been carefully corrected, so that as the book now goes to the purchaser, he is receiving the best work on Anatomy that is published in any language. Numerous additions—all of practical value—have been made, both in the text and illustrations. The coloring of the arteries, veins and nerves is a great improvement, and wonderfully aids the comprehension of the text descriptions. As such a book as this will, for the most part, serve a life-time, we would advise every doctor or student to get this edition with the arteries, veins and nerves in colors.

Differential Diagnosis: A Manual of the Comparative Semeiology of the More Important Diseases. By H. DE HAVILLAND HALL, M. D., Assistant Physician to the Westminster Hospital, London. Third American Edition. Thoroughly Revised and Greatly Enlarged. Edited by FRANK WOODBURY, M. D., Professor of Clinical Medicine in the Medico-Chirurgical College, etc. Philadelphia: D. G. Brinton. 1887. Demi 8vo. Pp. 255. (From Publishers.)

Such a book as this ought to be the frequent reference book of most practitioners. The fact that a new edition has so soon been called for shows how very popular this book is. It is reliable in its teachings, and covers a large field of practice. We recommend it to our readers.

Syphilis. By JOHNATHAN HUTCHINSON, F. R. S, LL. D., etc. With 8 Chromo-lithographs. Philadelphia: Lea Brothers & Company. 12mo. Pp. 512. Cloth. Price, $2.25. (From Publishers.)

This is not an attempt at a systematic treatise. Its chief purpose is to present the main clinical features of syphilis by the reports of cases in detail. As an addition in this direction to the valuable literature on the subject it is a success, but as a text-book it is almost useless. It is the manual for the physician to consult when he has a "hard case" on hand.

Complete Hand-Book of Treatment. By WILLIAM AITKIN, M. D., (Edin.) F. R. S, Professor of Pathology in Army Medical School, etc. Edited with Notes and Additions by A. D. ROCKWELL, A. M., M. D., Late Electro-Therapeutist to New York State Woman's Hospital, etc. New York: E. B. Treat. 1887. 8vo. Pp. 444. (From Publisher.)

This "Hand-book" is arranged as an alphabetical Index of Diseases to facilitate references, and contains nearly 1,000 formulœ. We have examined many sections with patient care, and the result is, we think it an *excellent* work for every day use by the physician. The busier he is, the better will this book serve his purpose. The therapeutics is good, and Dr. Rockwell has done good service by a number of his additions.

Treatment of Hæmorrhoids by Injections of Carbolic Acid and Other Substances. By SILAS T. YOUNT, M. D., Physician to St. Elizabeth's Hospital, etc., La Fayette, Ind. 12mo. Pp. 63.

This badly printed monograph is so filled up with little points of practical detail, that it is an exceedingly useful publication to the practitioner, notwithstanding. The author

makes no pretension to style of writing, but describes what he does in the terms of a practical workman. It is a valuable book—not by an enthusiast, but by one who plainly tells what the injection method will do and will not do.

Practical Treatise on Materia Medica and Therapeutics. By ROBERTS BARTHOLOW, M. A., M. D., LL. D., Professor of Materia Medica, General Therapeutics and Hygiene, Jefferson Medical College, of Philadelphia, etc. Sixth Edition. Revised and Enlarged. New York: D. Appleton & Company. 1887. Cloth, 8vo. Pp. xxiv.—802. Price, $5. (For sale by West, Johnston & Company, Richmond.)

This is necessarily a popular work. It is written chiefly from a therapeutic standpoint. It is very full of details as to prescriptions, and in the naming of diseases and conditions for which they are specially useful. A feature of very great utility to the general practitioner consists in the addition of the "Clinical Index," by referring to which the busy physician can be informed or reminded of the appropriate remedies for diseases named. This Sixth Edition is an excellent, practical work.

Lessons in Gynæcology, By WILLIAM GOODELL, A. M., M. D., Professor Clinical Gynæcology, University of Pennsylvania, etc. Third Edition. Thoroughly Revised and Greatly Enlarged. With 112 Illustrations. Philadelphia: D. G. Brinton. 1887. 8vo. Pp. 579.

The author of this book has made by his plain, practical dealings with gynæcological subjects, so many useful suggestions in diagnosis and treatment, that he is a favorite with all sections and schools. While these "Lessons" do not propose to cover the whole field of gynæcology, still most of the common ailments and diseases peculiar to women are here well described, as if in a clinic, and the treatment recommended is mostly such as any intelligent practitioner can adopt. It is a most valuable practical book.

Manual of Clinical Diagnosis. By DR. OTTO SEIFERT, Privat Docent in Würzburg, and DR. FRIEDERICH MULLER, Assistant Dir. I. Med. Klinik in Berlin. Third Edition. Revised and corrected by Dr. Friederich Müller. Translated by Permission by WM. BUCKINGHAM CANFIELD, A. M., M. D., Chief of Clinic for Throat and Chest, University of Maryland. With 60 Illustrations. New York: G. P. Putnam's Sons. 1887. 12mo. Pp. 173. (From Publishers.)

This "Manual" does not seem intended to take the place of any recognized authority that may now be in the doctor's library, but one of those useful additions which every

one feels is just the thing he has long wanted, to remind him of important data that has slipped out of memory. The "Manual" does not undertake to take up each individual disease and give diagnostic tables, but serves very excellently the same purposes to the established full works on diagnosis that Holden's *Landmarks* does to Gray's Anatomy. *Very many* useful tables, etc., are given.

Medical Treatment of Diseases of the Heart. Part II. By PROF. DUJARDIN BEAUMETZ. Translated from Fourth French Edition, by E. P. HURD, M. D., Newburyport, Mass. 1887. George S. Davis, Det oit, Mich.

This is No. 4, 1887, of "The Physicians' Leisure Library." Price, 25 cents, or annual subscription to each monthly part, $2 50. The present monograph is like all the rest of the selections made for this "Leisure Library"—excellent.

Hand-book of General and Operative Gynæcology. By Dr. A. HEGAR, Professor of Obstetrics and Gynæcology, University of Freiburg, etc., and Dr. R. KALTENBACH, Professor of Obstetrics and Gynæcology, etc., University of Giessen, etc. In two Volumes. Vol. II. With 248 Wood Engravings. Edited by EGBERT H. GRANDIN, M. D., Obstetric Surgeon to New York Maternity Hospital, etc. New York: Wm. Wood & Co. 1887. 8mo. Pp. 354.

This second volume of Hegar's and Kaltenbach's great Hand-book forms Vol. VII. of the *Cyclopædia of Obstetrics and Gynæcology*, being issued this year as a part of "Wood's Library." This volume treats of operations on the tubes, uterus, broad ligaments, round ligaments and vagina; operations in urinary fistulæ; prolapse operations; operations on the vulva and perineum. As operative gynæcologists, the authors are too well known to commend them. Their work gives always plain, practical descriptions of conditions and operations. A full index to the two volumes of their hand-book is appended to this volume.

Treatise on Human Physiology. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence, Jefferson Medical College of Philadelphia, etc. Philadelphia: Lea Brothers & Co. 1887. 8vo. Pp. 945. Leather. (For sale by West, Johnston & Co., Richmond.)

To the long list of excellent works on Physiology now on hand we have to add another, just as good as others in every particular as a text-book, and having the advantage over some of being "the latest out." So that, if we were just now

on the list of purchasers, we would ask for this book; but if we had the last editions of Dalton or of Forster, or perhaps some others, we would not throw them away simply to substitute this new claimant for recognition as authority. Among the improvements we notice in this work over other text-books we might refer to the section on "Localization of Brain Centres." The chapter on digestion also is a good one, presenting the most recent views on the subject. It is a good text book.

Editorial.

Physical Culture in Academic Colleges, Schools, Etc.

Randolph Macon College, Va., deserves the credit, we believe, of being the first Academic College of distinction in the South that has established a special department for the physical development of its students *as a part of its* curriculum. This department was formally opened November 8th, 1887; and a very excellent introductory address on the subject of culturing the physical *pari passu* with the mental faculties of the student was delivered by that gifted speaker and writer and distinguished practitioner of medicine, Dr. John Herbert Claiborne, of Petersburg. A number of the profession of Richmond and other places did him the compliment of attending the opening ceremonies, as also to manifest their approval of the new feature. It is not the intention of the authorities of the Randolph Macon College to develop this department into the graduation of physical athletes; but simply to urge upon its 150 or more students, who have come from all parts of the Southern States especially, the importance of developing or sustaining a sound body for the indwelling of a sound mind. A full Professor and an able assistant have been elected to have sole charge of this department, and by the generosity of the Board of Visitors and the many friends of this renowned college, a spacious and an attractive hall, or Gymnasium, has been built upon the grounds, with a complete set of apparatus—bars, ladders, swings, dumb-bells, etc. It is the intention of the Professor (whose whole time is given to this department) to so exercise the student's every muscle and joint as to let his physical development be in keeping with the high grade of mental proficiency, which characterizes the graduates of the Institution.

We make this note in the hope that doctors connected

with private or public school boards or academic colleges will give this matter of physical culture of the students their attention, so as to prevent them from being turned out "distinguished graduates" with pale faces, enfeebled bodies and broken down physical constitutions at a time when full vigor of the body should be present to enable them to enter hopefully into the rough battles of life for money and position. It is only necessary for one to recall how comparatively few are the instances, where boys stood at the very head of their academic classes, and have come away from schools and colleges physically impaired by mental strain, who have been able to cope for any great length of time with their more hardy competitors, who took care to develop their physical along with their mental abilities. It needs no argument nor any new facts, but simply the suggestion which we have here thrown out to our readers, to impress the practicability of this feature in connection with like institutions throughout this country. Physicians, above all others, should take the lead in persistingly insisting that properly-conducted *physical culture* should be as much a part of the tuition of the boy or girl as his or her grammar or arithmetic. We hope soon to hear of all *academic* colleges and schools of other sections following the example so commendably set by Randolph Macon College, Va.

The Medical News Visiting List for 1888

Is ready—Messrs. Lea Brothers & Co., of Philadelphia, Pa., publishers. This List improves each year. This year it has a useful lead pencil erasable slate as a fly leaf. The paper is good, and the ruling of pages is better than most Lists. The binding is durable and has a pocket flap. In short, it is about the best List we have seen this year for general practitioners.

Littell's Living Age for 1888.

This standard weekly magazine soon enters upon its forty-fifth year. It is the only satisfactorily fresh and complete compilation of the best periodical literature of the world. It is well nigh indispensable to the American reader, as it enables him, with a small outlay of time and money, to keep pace with the best literature of the day and abreast with the work of the most eminent living writers. Reduced clubbing rates with other periodicals are given, and to new subscribers remitting now for the year 1888 the intervening numbers are sent *gratis*. Littell & Co., Boston, are the publishers.

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Original Communications.

ART. I.—A History of the Medical Department of the University of Virginia. Its System of Education, and its Results.

By PAUL B. BARRINGER, M. D., Davidson College, N. C.

Mr. Chairman, Professors, Students:—

It was the custom with certain tribes of American Indians in the earlier days of this continent, whenever they established a village, to erect a mound and place thereon a pile of stones, one for each lodge in the village, and to celebrate around this monument a feast, at which the medicine man of the tribe recounted the history, recalled the traditions, and enumerated the past glories of their race. In this way there could, in after years, be traced by these monuments, the rise and fall—the history of their tribe. With this precedent before me, then, it seemed to me, at the dedication of this new monument to the growth and progress of our *Alma Mater*, that I, as the medicine man of the occasion, could do nothing more appropriate than to recall the early history, and recount the traditions and glories of this

*An Address delivered before the Students and Alumni of the Medical Department of the University of Virginia, October 25th, 1887.

venerable School of Medicine—to show you around this new monumental pile, how from a small beginning, in spite of the reverses of our land, the jealousies of rivals, and the calumny of foes, it has developed and grown till to-day, after more than sixty years of vigorous growth, it stands in the front rank of medical progress, with a history of success with which few can vie, and which none can surpass. Let us then review the early history of this Institution, of which this school is a part, and see with what great care, and by what great minds its youthful form was moulded and its early course directed, that it should have been successful in the fulfillment of so many hopes.

On the 1st day of August, 1818, there met at Rock Fish Gap, on the Blue Ridge, the commissioners appointed by the Virginia Legislature to draft plans and specifications for an institution of higher education for the Old Dominion, to be called the "University of Virginia."

As if in anticipation of the subsequent influence to be exerted by this Institution, not only upon the State, but upon the nation at large, we find the men composing this commission to be men, not merely of local, but of national reputation and renown—heading the list with the names of three Presidents of the United States, Mr. Jefferson, Mr. Madison and Mr. Monroe, in the order of their tenure of office. The latter had forsaken the duties and cares of the Presidential chair, which he then filled, to be present at this meeting. But in spite of his marked talents and his impressive official dignity, it was to Mr. Jefferson that the eyes of all were turned as the personal embodiment of the spirit of this cause. Already in the watchful care over this trust, did he give a forecast of that continued parental solicitude that gave him in the end the well-deserved right to claim for himself the title of "Father of the University of Virginia."

The first business of the commissioners was to fix upon a suitable site for the University. The names of three places were proposed. Staunton, in the county of Augusta; Lexington, in the county of Rockbridge, and Central College, in this county. Each had its friends, and the result was in doubt till Mr. Jefferson, with other arguments, produced the

names of a long list of octogenarians living in this neighborhood. That turned the scale in favor of its present site, and time has but added to this endorsement of the healthfulness and salubrity of this locality. As a further evidence of the care and thoroughness with which these plans had been previously canvassed, the University as it stands to-day, in both architectural design and system of education, represents no material departure from the plans adopted at Rock Fish Gap. The system of instruction, however, interests us thenceforth only as related to the Medical School. Suffice it to say that after six years spent in the erection of buildings and perfections of plans, the University was thrown open to students on March 7th, 1825, and went to work with but forty students. This number, however, soon grew, and by the end of the term was quadrupled. The School of Anatomy and Medicine was the modest title applied to the single school, which has since developed into the Medical Department of the University of Virginia. This Chair was then confided wholly and solely to the care of one Professor, Dr. Robley Dunglison, of England.

Before proceeding further to the consideration of this illustrious name, in order to appreciate the benefits that even a school of this size offered, let us turn aside for a moment to view the condition of the profession in the United States at this time, more especially the profession in the Southern States. There were at this time schools of medicine at Boston, New Haven, Hanover, New York, Philadelphia and Baltimore—all, as you will observe, north of Mason and Dixon's line. Not only was this true, but except for the seaboard cities, the difficulties of travel and the long delays in communication rendered these schools but little less than foreign to the States of the extreme South. In a catalogue of the Boston School of Medicine of this date (1824), I find among 110 students, the names of but two Southern men, and they were both from Charleston. The above condition of isolation, coupled with sectional animosities, already beginning to exert themselves, caused the above-named schools to be but poorly patronized by students from the South, though Philadelphia and Baltimore were more patronized

than Boston. London was the medical *Mecca* of that day, and the more ambitious young men of the South went there, and upon their return found little difficulty in building up local schools of considerable size. Such were the schools of Dr. Mettaue, in this State, and that of Dr. Harrisr, in North Carolina.

Under these conditions, you can readily see what an influence a medical school under the auspices of a University of broad and liberal culture would exert. The foregoing facts also, no doubt, in connection with Mr. Jefferson's knowledge and appreciation of the outside world, influenced him in selecting as the Professor of this School an Englishman, in the person of Dr. Dunglison.

Dr. Robley Dunglison was a young man not more than twenty-six years of age, but in the land of his nativity he had already gained a reputation, and as a writer in the *London Medical Intelligencer*, of which he was editor, he was already beginning to give promise of those high literary attainments which ultimately made him the first medical author of his day. Even at this time he was no ordinary man—being a man of broad views, wide general education, and, above all, wonderful energy and versatility. One would have thought that to have fulfilled all the duties pertaining to his chair, in addition to his official duties as chairman of the Faculty, would have engaged the entire time of any one man. But while here engaged in his multifarious duties, we see him in conjunction with Professor George Long, of the University, editing a study of Roman and Greek geography.

This evidence of wide classical training was subsequently signally shown in the production of his "Medical Dictionary," which is even at this day, the best work of its kind in the language.

Such culture could not fail to attract, and in 1827, within two years after the opening of the University, in compliance with a generally expressed demand, what had previously been but a single school was enlarged into a Department; and thus we find, in October, 1827, just sixty years ago, that the life history and sphere of usefulness of

this illustrious School of Medicine began with Dr. Dunglison as chief. And here, gentlemen, let me say that to a school, whose pride has ever been that its diploma represents a fixed standard of general scholarship, in addition to medical knowledge, it should be a matter of just pride and infinite satisfaction that its bark was first launched and guided on its course to success by the man whose name represents above all others, that which is broad and classical in American medicine.

From that day till the present, if we except one dark year of the war, it has, term after term, and year after year, sent forth its graduates as "missionaries in the cause of health; soldiers, and, if need be, martyrs in the unending battle with disease and its cause."

We have not time to follow out here the full record of the changes which the hand of time has wrought in the professional corps of this old medical school, or to pay aught but a general tribute to the memory of her devoted dead. So having given in detail the cause and circumstance of her beginning, and the prophetic significance of the greatness of her founder, I will now pass on to consider certain peculiarities of her educational system left as le cies by her founders. These have, from their marked variance from those of similar institutions in the land, caused much criticism and much comment. There are not a few, however, who consider them to have been the main cause of her wonderful success. I allude to her location under the wings of her fostering mother; to her peculiarly long course of study for a medical school, and to her simple, but incomparable standard of requirements for graduation.

At various times in the history of this department, its removal to some large city has been urged as necessary to keep pace with other institutions of similar character in the land. Most wisely, in my opinion, this has not been done.

We have here what perhaps cannot be found elsewhere in the United States; a University of the Arts and Sciences, combining schools of general literature and science with those of law and medicine—well supplied with halls, mu-

seums and libraries, and with the general paraphernalia of college equipment; under similar environment, similar management and, above all, imbued with a similar spirit, an *esprit de corps* that wealth cannot purchase nor brains alone create; a distinctive corporate spirit that is peculiar to educational centers of this kind, where all the branches of useful knowledge and the elements of a finished education are brought together. These are not to be found in the isolated, individual schools. The various branches, when thus opposed, all tend to emulate, illustrate and adorn each other, and when separated, but a small part of the vital spirit goes with the dismembered part. For learning is not an inanimate thing; it is a living body; its different members belong together, as parts of a co-ordinated whole, and cannot be drawn and quartered with the expectation that they will live. We should be willing to forego many of the advantages to be found elsewhere, and to make all needful sacrifices to keep this department here

Of late, it has been often deplored that medicine is ceasing to be one of the broad professions; that its range of thought is being daily more narrowed to the mere limits to technical study. If this be true, and I fear that it is, its reason is assuredly to be found in the narrowing influence of isolated schools.

But does this Department suffer by its absence from the larger cities? Does not the widened horizon of general culture more than compensate for the comparative insignificance of the clinical advantages here to be found, as compared with those of a great city?

This opens up a wide field of discussion, one far too wide for a paper of this sort, but a few points may be broadly put. No college, or department of medicine, with the short term of service required for a degree in America, whatever may be its clinical advantages, can turn out a finished practitioner. I doubt not that, even if the present term of service were doubled, the result would be the same. It is only when you come face to face with disease, alone and unaided, that the intellectual faculties are quickened to the extent that their tension puts its lasting impress upon the mind.

and those moral qualities are engendered which go to make up the practitioner. In the dread contest with a foe whose insidious approach is never heralded, whose panoply of war is as variable as the devices of the devil, and whose mode of action is ever influenced by conditions and surroundings which no man can guage—to meet a foe of this kind, which is better, a short training in the use of those arms usually attributed to him, or a system of general medical gymnastics that sends forth its athletes prepared for all emergencies, confident and valiant? It is here, gentlemen, that our old *alma mater* stands supreme. Making the known, firmly established, fundamental principles of medical science a specialty, her students are prepared to reap the full benefit of clinical advantages. Clinical demonstration with such preparation can be understood; and whether received by the student here, or at the bedside of his first patient, it will make a lasting impression. I do not disclaim the benefits of clinical instruction, and heartily endorse the action of your professors in establishing the new Dispensary. An abundance of clinical material is of inestimable advantage, if properly used. There can be no denial of this. Such institutions as the Post-Graduate School of New York, and other cities, where clinical instruction alone is used, have been of value beyond measure to the medical profession of the land. But the results before us of some of the other colleges whose clinical instruction is abounding, may well cause us to ask, Is this all that is necessary?

By no means. Medicine is a science, and should be taught as a science. The art is but her hand-maiden. The latter should always give precedence to the former. The great mistake of most schools is that the art is nurtured to the detriment of the science. To such an extent has this been carried, that in one of the best known schools of the land they give to first-course students and all seventeen hours a week for clinics, and but two for physiology. This is sending them to seed almost too soon.

But this is not the fault of America alone. It is the fault of the present medical world—if we except, perhaps, Germany. That this system of object-teaching, as we might

call it, applied to medicine can make successful practitioners, we see daily exemplified. But while to be a successful practitioner is an end to be devoutly desired, is it the chief end, as we say in the catechism, of a medical life? Are we to live and die in the utilization of a profession, leaving nothing added to its advancement? Not something alone of technical skill—for heredity alone would in time accomplish this—but something in the line of which the medical world now looks most eagerly, something toward the line of the solution of phenomena of every-day life, which leads to the solution of the cause of every-day death. Barring accidents, such discoveries must come from among those best armed with the knowledge now possessed in this line.

If the history of German medicine shows anything, it shows this to be true. For—deny it as we will—for the last decade the world has been but amplifying upon data obtained from Germany, from men educated in just such schools as this, which, in its method of teaching, and in its many differences from the ordinary schools, approaches more nearly to the German type. Now, what have been and what now are the peculiarities of this school, as distinguished from most American schools?

First, we will mention the nine months' session. The early fathers of this institution, in their simplicity, could see no reason why it took less work and less study to become a physician than to become a lawyer or a preacher, and decreed that we should have six days a week for nine months, and no Christmas. This is the longest term of continued medical study in the United States, and fully double the average term.

A second peculiar feature, as compared with other medical schools of this country, is that the professors devote their whole time to their duties as teachers, and such professional duties as are required at the Dispensary and Hospital. This is not usual, even in the medical departments of the universities. But here the bond of relationship of this school to its mother, being as great. in reality, as it is in the catalogue, no distinction is made in the duties of the professors.

But the feature of this school which departs most widely

from the average American type, is the feature relating to the requirements for graduation. Having a fixed, and not a comparative standard of scholarship, the requirements for graduation are robbed of many of their formalities. There is no prescribed time of attendance, which, while tantalizing the ambitious, serves to cover the incapacity of the dullard, and the short-comings of the slothful; no thesis, by which to measure, instead of literary qualifications, powers of hypothecation. These are wisely dispensed with.

But in the examination hall, within a given time, the student must here give evidence in writing of a certain standard of scientific and literary scholarship. And what is this standard? It is to attain a minimum of 80 per cent. upon the valuation of a series of written examinations, covering the whole field of medical study, and, moreover, to show by composition and general expression educational acquirements commensurate with the dignity of this venerable institution.

A diploma of this kind represents something tangible. It is a certificate of good faith on the part of the donors, and a representative of good work on the part of the recipient. Of the bearers of such diplomas, it would be but just to expect something more than of the average medical graduate. I think we will find proof that our expectations have not been in vain.

If the diamond is valuable, not only from its intrinsic beauty and worth, but from its rarity, in what esteem must be held the 616 diplomas only that have been given up to 1880 from among over 3,000 matriculates in this school since 1828? And remembering that there stood no barrier to the graduation of these except the high standard of knowledge imposed, we appreciate the full value of its discriminating power. All honor to the early censors of this school, who established and have maintained this high standard, unlowered even in the darkest days of the Department's need!

Is there another school in the United States that can approach such a record. We throw down the gauntlet, and challenge comparison. Of these 616 graduates, no less than

forty-three are now, or have been professors and teachers of medicine in the various medical schools of the land.

Through what widening channels, then, must the influence of this old Medical Department be felt? Of all the places of honor and distinction open for competitive examination, without favor or bias, to the young medical men of the United States, there are none that require a higher standard of scientific scholarship than the medical corps of the United States Army and Navy. From first to last, sixty of the graduates of this school have been in this service; and, as if to show beyond cavil that, though old in years, she is still youthful in vigor, between the years 1870 and 1880, no less than 38 out of 180 of the graduates of this school obtained entrance into the corps, with very few failures on the part of the applicants. From the Official Register of the Army and Navy for the year 1885, I find no less than 16 out of 57 Passed-Assistant Surgeons in the Navy were University of Virginia men, while in the Army the graduates of this school were 14. When you know that there are usually ten men for each vacancy. and that they represent the flower of the young profession of the land, you will appreciate what these figures mean.*

In the Confederate Army and Navy there were more than 250 of the graduates of this institution. Of the two Surgeons-in-Chief of the Confederate States Army, the first bore the diploma of this school, and the other had been a student within its walls.

Throughout the length and breadth of this broad land, from Maine to Texas, you will find them, standing ever in the line of duty, leaders in the vanguard of progress.

With such traditions, and with such a record before us, let us then, at the dedication of this new Anatomical Hall, renew our tribal allegiance; and by united effort, so endeavor that, with the march of time, the traditional New Zealander, pondering perchance over the ruins of America, shall never see aught here to belie the glorious history and never-staying progress of this noble Institution!

* Before the various State Boards of Medical Examiners, so far as can be learned from official reports, no medical graduate of the University of Virginia has been refused license.

ART. II.—Value and Proper Use of Arsenic in Skin Diseases.

By GEORGE H. ROHÉ, M. D., Baltimore, Md., Professor of Dermatology and Hygiene in the College of Physicians and Surgeons, etc.

The uncertainty of therapeutics is well illustrated by the contradictory opinions held by practical men upon the utility of arsenic as a remedy in skin diseases. While some claim arsenic as a specific, lauding it in the most varied affections as the remedy *par excellence*, others discard it almost altogether.

We do not have to go far to find the causes of this disagreement. In the first place, the study of the physiological action of drugs is still limited to a small number of practitioners; and secondly, the diagnosis of diseases of the skin is not a highly developed branch of medical art. Hence it is easy to see why agreement on this point is so difficult. Most of the therapeutic knowledge at our command is derived from practical experience, and as the conditions under which the observations are made are not accurately defined, the results are incomplete, and must, in the nature of the case, often be discrepant.

The internal use of arsenic in skin diseases dates from the beginning of the present century, when Girdlestone recommended it highly in lepra and psoriasis, or what we should call now, psoriasis and scaly eczema. Willan, in the first American edition of his book, published in Philadelphia in 1809, also refers to its use in "lepra alphoides"—(our present psoriasis).

The careful clinical observations of the older physicians, and the more recent researches in pharmacology, indicate that the nutrition of the skin is powerfully affected by arsenic. In experimenting upon frogs, Drs. Ringer and Murrell discovered that if the animals were poisoned with arsenic, the epidermal layer of the skin could be readily stripped off after a few hours. This shows that it causes some profound alteration of nutrition of this organ. On examining sections of the skin of frogs which had been so poisoned, Miss Emily Nunn, working under the direction of

* Read before the Medical Society of Virginia, Oct. 20, 1887.

Professor Michael Foster, found that the columnar layer of the *rete* was more or less separated from the cutis, the epidermis being attached only by a few protoplasmic processes.

In corroboration of this result of experiment, Piffard relates a case, in which a patient affected with psoriasis had taken, by mistake, a teaspoonful of Fowler's solution, with the effect of completely removing the eruption within a few days. Under my own observation, several years ago, a young man attempted suicide with arsenic. The poison caused acute gastritis, and a complete exfoliation of the epidermis. Afterward he also had a nervous affection, with symptoms resembling those of acute anterior poliomyelitis.

These toxic manifestations of the drug are merely the exaggerated evidences of its physiological action. They show that arsenic modifies especially the nutrition of tissues derived from the epiblastic layer of the embryo—the skin and nervous system. If we bear this in mind, it will not be difficult to determine the classes of cutaneous diseases in which the drug will probably be useful.

One other physiological effect of arsenic is hyperemia of the skin. This renders it an appropriate remedy in most cases of *acute* inflammation. Hence, in such diseases as acute eczema, the administration of arsenic usually intensifies the affection.

Some writers on arsenic claim that its beneficial effects are entirely due to its tonic or restorative action upon the blood. Comparison with such remedies as iron and manganese shows, however, that its hematinic action does not account for its specific or selective effects upon the skin.

The diseases in which arsenic, when properly employed, may be expected to prove useful are the following:

Chronic eczema, especially its papular and scaly forms. In the pustular form of eczema, which so often occurs upon the face and scalp of children of a strumous habit, it is also of use, but must be combined with iron and cod-liver oil in order to produce its best effect. In these cases some local antiseptic application should also be used.

In *papular eczema,* I frequently depend almost altogether upon the arsenic for a cure, the local application being merely such as will relieve the intense itching.

I recall a case of this sort in a German boy of ten years of age. He had a universal papular eczema, which caused great suffering from the intense itching. Nearly the entire surface of the body was covered with a small papular eruption, which had existed since his second year. From the distribution of the eruption, its persistence for years, and the intense pruritus, I was at first inclined to venture a diagnosis of prurigo, and afterward learned that such had been the diagnosis of one of the most distinguished dermatologists of Berlin. However, after keeping the patient under observation in the City Hospital for a few weeks, I was satisfied that the case was a severe papular eczema.

After a few small doses of calomel, I began the administration of arsenic in the form of Fowler's solution, commencing with three drops thrice daily. Every third day the daily dose was increased by one drop. No effect was apparent until the dose of six drops was reached, when redness and irritation of the conjunctivæ came on, followed by a pretty rapid disappearance of the eruption. No other internal treatment was used. Locally, a lotion of bicarbonate of sodium (1:16) was employed to allay the itching.

Another case was that of a negro boy, 20 years of age, suffering from a chronic scaly eczema, covering almost the entire trunk and thighs. There was much infiltration and deep fissures about the joints, causing great pain on motion. The itching was severe. Fowler's solution was ordered in four-drop doses, to be gradually increased, as in the former case. For three weeks no effect was manifested, and the Resident Physician of the Hospital asked permission to change the treatment. He was directed to persevere, however, and in a week longer the effects of the remedy were apparent. In the course of a month the patient left the Hospital, entirely recovered. External treatment was combined with the arsenical medication, but it could only have been of minor influence in this case.

I could easily quote dozens of cases of eczema where the effects of this remedy were equally striking.

In *pemphigus*, a disease against which we were formerly entirely helpless, arsenic acts as a specific. This effect was first noticed by Hutchinson. In all the cases that have come under my observation I have used arsenic, and always with the happiest effect. I may be pardoned for referring here to a case which has recently been under my care.

The patient was a female of 60 years of age, who suffered from an intensely itching bullous eruption of the vulva, perineum, upper portion of the thighs, and buttocks. The constant maceration and scratching brought about an inflammatory condition of the parts, which for a long time obscured the diagnosis. Under the most various medication, both internal and external, the disease which had been diagnosticated as eczema rubrum, constantly became worse. When I was consulted, the vulva, inner surface of the thighs and buttocks were excoriated, exquisitely sensitive to the touch or to the mildest applications, and studded with blisters varying from a pea to a lima bean in size. These blisters recurred in crops, several of them appearing every two or three days. The remainder of the body was free from eruption, with the exception of a solitary bleb on the back of the right wrist. After the diagnosis was corrected, arsenious acid, in doses of $\frac{1}{33}$ grain, afterward increased to $\frac{1}{25}$ grain, was given every two hours during the day, and a weak lead and opium lotion applied externally. In two weeks the formation of blisters had diminished in rapidity, the sensitiveness had almost disappeared, and the extent of surface affected had been reduced to one-third. In two months the patient was well enough to go driving, the first time she had gone out of doors for eight months. In this case arsenic had been given before I was consulted, but no good effect had been obtained from the remedy, on account of the smallness of the dose.

In arsenic, we possess a sovereign remedy in that characteristic epidermal hyperplasia, *psoriasis*. Dermatologists always use local remedies in this disease, as a matter of course, in combination with the internal medication; and I have frequently secured the temporary disappearance of the eruption with local applications alone. But the disappearance is always more rapid if arsenic is given at the same time.

Drs. Taylor, Piffard, Keyes and Sturgis, of New York, give arsenic for its tonic effect in *syphilis*, and claim good results from it. I have no experience with it in this disease, but believe it to be useful in certain cases.

In *acne*, arsenic is of limited utility, most cases of the pustular form being rendered worse by it; but in cases of what I have been accustomed to call menstrual acne in young

women, it often acts like magic. Several of my patients keep a small vial of $\frac{1}{50}$ grain tablet triturates on hand, and take the remedy during the menstrual period. They claim almost absolute immunity from what was formerly one or two weeks' disfigurement in every month.

Lichen ruber is a comparatively rare disease in this country, but in the few cases I have seen, arsenic has maintained the reputation bestowed upon it by the elder Hebra.

In his admirable "Practical Observations on the Venereal Disease, and the Use of Mercury," Dr. Abraham Colles says: "It will be readily conceded that the efficiency of any remedy in the treatment of disease must, in a great measure, depend on the accurate knowledge which the practitioner possesses as to the most judicious mode of administering it." I suppose every practical physician will agree with this. If half the time and labor expended in seeking out new drugs were devoted to the careful study of those already in our hands, I feel sure the results would be fully as good as those now obtained.

Much valuable knowledge has been recently added by the labors of devoted students of pharmacology, especially in Great Britain and Germany. In this country, also, the work of such experimenters as Wood, Smith and Ott deserves the heartiest recognition and encouragement. It would seem more profitable, however, if some of the older drugs, whose good effects in certain morbid conditions, clinicians have long since proven, were submitted to the rigid tests of the experimentalists, instead of newly-introduced substances, of which we often do not even know the derivation. How little do we really know of the mode of action of mercury, iron, or iodine; and until the researches of Binz, how vague and indefinite were our views of the action of quinine and alcohol. Pharmacology should therefore not be looked upon as a mere "fancy study," but as a valuable adjunct to practical therapeutics, and studied side by side with clinical medicine.

Basing my practice upon the results of experimental investigation and the clinical observation of my predecessors and co-workers in practical medicine, I have followed a plan

in the administration of arsenic which has, in the class of cases before mentioned, yielded, almost uniformly, the best results. I now use, in appropriate cases, but two preparations of this drug—arsenious acid in substance, and the solution of arsenite of potassium (Fowler's solution). For a time I gave a solution of arsenious acid in dilute hydrochloric acid, but have discontinued it because its administration is so frequently followed by an eruption of abscesses or pustules. I am not quite prepared to assert that the abscesses were the result of the administration of this preparation, but as they were so uniformly the sequel of its use, and did not follow the employment of other arsenical preparations, I discontinued the use of the former combination.

Dr. Fothergill has pointed out that in certain cases of anemia, iron fails to have any good effect until a course of saline laxatives has been administered. According to my observation, arsenic likewise often fails in producing any beneficial action until certain preliminary, or what might be termed preparatory, treatment is instituted. To children I generally give, for three or four days, small doses ($\frac{1}{10}$ grain) of calomel every three hours. After this brief mercurial course, the administration of arsenic (Fowler's solution) is begun in two or three drop doses thrice daily, according to age, increasing the dose by one drop per day on every third day, until the physiological or therapeutical effects of the drug become manifest. When this point is reached, the dose is decreased one drop, and held at that dose until the effects sought are obtained.

In adults, I also frequently begin the treatment with the mercurial, but rarely continue it longer than two days, after which I give the following saline combination for ten days. The diuretic—I am tempted to say depurative—action of this prescription seems to prepare the system to derive the fullest benefit from the arsenical course. The formula is:

℞. Potassii acetat.....ʒj
Ext. taraxaci fl.....fʒj
Aquæ, qs. ft.....fʒij

M. S.—Teaspoonful in a tumblerful of water three times a day, a half hour after meals.

The patient is now prepared to benefit from the arsenic. Whether arsenious acid or Fowler's solution be given, the dose must be strictly regulated. I usually fix an hour at which the medicine is to be taken, if the patient is confined to the house. Thus, instead of saying, take one dose every two or three hours, as the case may be, I direct the dose to be taken at 8, 10, 12, 2, 4, 6 and 8 o'clock. Such specific directions are more likely to be closely followed than when any discretion is allowed the patient.

When ordering arsenious acid in substance, I generally direct the tablet triturates, first introduced by Dr. R. M. Fuller, of New York, and now made by most manufacturing druggists. They are made in tablets containing from $\frac{1}{20}$ to $\frac{1}{200}$ grain. I rarely use a larger tablet than $\frac{1}{50}$ grain, more frequently $\frac{1}{100}$ grain. If a larger dose is desired, it is easy to give two or three tablets. By ordering the smaller tablets, it is much easier also to increase the dose gradually. These tablets may be taken like pills, or dissolved in water. I have never known them to cause irritation of the stomach when the dose was properly adjusted. It is perhaps better to give the dose, especially if at all large, after taking food. I frequently precede the dose, in the intervals between meals, by a glass of milk. In this way I have given a patient one-fourth of a grain of arsenious acid daily for two months without producing any unfavorable effect upon the system.

If, instead of the arsenious acid, I give Fowler's solution, I order it in sherry wine, or cinnamon water. For children, equal parts of simple syrup and cinnamon water makes an elegant vehicle, in which the remedy is readily taken. If given simply diluted with water, the flavor of lavender in the Fowler's solution soon palls upon the taste, and in many cases produces nausea. This preparation is likewise begun in small doses (3–4 drops), and increased gradually until the desired (or toxic) effects are obtained.

Regarding the danger of poisoning by medicinal doses of arsenic, I desire to say a few words. The smallest toxic dose, as pointed out long ago by Mr. Hunt, is fifty times as large as the average medicinal dose. Hence, the proba-

bility of fatal or dangerous poisoning from arsenic administered in medicinal doses is extremely remote. Further, cumulative effects need not be feared. The drug is rapidly eliminated from the system; and if the excretory functions are droperly performed, no accumulation of the poison in the body can take place. Its harmlessness, when its effects are watched, is attested by the absence of cases of fatal poisoning from the remedial use of the mineral.

In what I have here said, I have desired to put upon record my conviction that arsenic, properly used, is one of our most valuable means of combatting certain skin diseases, most prominent of which are papular eczema, psoriasis, lichen ruber and pemphigus; that when intelligently used, this time-honored remedy is non-toxic and harmless, and that it is rapidly eliminated from the system, and hence cannot produce what are termed "cumulative" poisonous effects. I would not be understood, however, that I omit appropriate local treatment in any case. Both for palliative and curative effects, I regard local medication in skin diseases generally as the main indication. But in some affections of the integument, notably those just mentioned, the main reliance must be placed upon the internal treatment. In these, the local applicatious can only be looked upon as adjuvants.

611 *N. Calvert Street, Baltimore.*

ART. III.—**Treatment of Gunshot Wounds of the Abdomen.***

By THOMAS J. MOORE, M. D., Member Medical Examining Board of Virginia, Section on Surgery, etc., Richmond, Va.

The reports of the Medical and Surgical Departments of the French and English governments, after the termination of the Crimean War, first attracted the attention of the medical men throughout the world as to the fatality attendant upon the treatment of penetrating wounds of the abdomen.

* Read before Section on Army and Naval Surgery, Ninth International Medical Congress, Sept. 5th, 1887; also Richmond Medical and Surgical Society, Dec. 13th, 1887.

The subsequent wars that have been waged by European governments, as well as the late great civil struggle in this country, have added but little of an encouraging nature to the literature upon this subject. The statistical reports offer nothing but the tabulated statement of deaths and recoveries, chiefly the former, under the conservative expectant plan of treatment. That this plan of treatment was to be much longer continued, could hardly be expected.

To Guthrie, Baudens and Legouest are we indebted for the first practical suggestions in the way of surgical interference in this class of cases. Yet their conception did not extend beyond the mere enlarging of the wound of exit or of entrance, for the purpose of repairing such injuries as were contiguous or easy of access. Abdominal section (proper) was not dreamed of by them.

Dr. Walters, of Pennsylvania, was the first surgeon on record who performed abdominal section for internal abdominal injuries. He operated for ruptured bladder in 1862, his patient recovering. In the following year (1863), Dr. R. A. Kinloch, of Charleston, S. C., opened the belly in order to repair internal abdominal injuries arising from a gunshot wound; the patient survived. A number of gentlemen, following in the wake of Guthrie, Baudens, and Legouest, within the next few years, enlarged and advanced their views; and in America we had McGuire in 1873 and 1881, Otis in 1876, Dugas in 1876, and Sims in 1882, all recommending laparotomy for the repair of certain internal abdominal injuries, especially those arising from gunshot wounds. The views of these gentlemen were published to the world with a strong degree of enthusiasm; and yet the majority of the profession at the present time adhere to conservatism.

The first successful operation, after those of Walters and Kinloch, was performed in 1863 by Kocher, of Berne. He entered the abdomen and sutured a gunshot wound of the wall of the stomach; the patient recovered. The following year, W. T. Bull, of the United States, in a case of pistol-shot wound of the intestines, met with a successful result. As the few cases that had been operated upon from 1863 to

1883 had uniformly died, the publication of these two successful cases gave a new impulse to this operation, and created a desire with the medical men to put laparotomy to the test in this restricted line.

The ovariotomists had already largely explored the field; all the minutiæ and details essential for opening and closing the abdomen had been worked out. They had demonstrated one capital fact—the danger involved in operating the abdomen for diagnostic purposes had been greatly exaggerated, the risks incurred being slight in the extreme in purely exploratory operations. With these data before them, surgeons became less chary about opening the abdomen, when deemed essential to the preservation of life. In consequence, quite a number of operations for gunshot and penetrating wounds have been performed in the past few years.

Dr. Thos. S. K. Morton, with great industry and much patience, has collected all the cases that have been reported from 1862, to January 26th, 1887, throughout the world. He deserves the thanks of the profession at large for this invaluable statistical report. The number of cases reported is 57; of these, 38 per cent, were for pistol- or rifle-shot wounds, 35 per cent. for stabs, 17 per cent. for ruptured bladder, while 10 per cent. were for ruptured intestine.

Of these 57 cases, there were 22 cases of penetrating gunshot wounds of the abdomen, operated upon by laparotomy; of these, 5 recovered and 17 died, a mortality of 77 per cent. Dr. Morton reports 19 cases of stab wounds, with 12 recoveries and 5 deaths, a mortality of 36 per cent. In ruptured bladder 10 cases, 4 recoveries and 6 deaths, a mortality of 60 per cent. There were 5 cases of ruptured intestine, all dying after operation. The average death rate of all these cases is 63 per cent.; and if those of ruptured intestine be excluded, where all died from the severity of the injuries, we have as the whole number of cases operated upon 82, number of deaths 30, average mortality $58\frac{42}{100}$ per cent. The records of the French Army, after the Crimean War, show, for penetrating wounds of the abdomen, a mortality of $91\frac{7}{10}$ per cent. The English report an average of $92\frac{5}{10}$

per cent. The American statistics, during the late war, give us an average of $87\frac{2}{10}$ per cent. From the above statement, we have a legitimate mortality of $58\frac{42}{100}$ per cent. where laparotomy and repair of internal lesions has been resorted to, against $87\frac{2}{10}$ per cent. where the expectant plan has been adopted. The saving of 29 lives out of every 100, that would necessarily be lost under the old plan, is eminently suggestive.*

From the examination of the report of Dr. Morton, one finds, in every case of death, where post-mortem was granted, the cause of death was both apparent and inevitable; and in no case could it be attributed to the operation. That we may look for more marked success in the future, we have every reason to hope. The operation is comparatively new, and a proper knowledge of details has not as yet been acquired. Unfortunately for the profession, no one individual has operated sufficiently often to be considered an authority upon disputed points.

Drs. Bull and Dennis have each operated five times, with the same results—two recoveries and three deaths. With the single exception of Kinloch, who has operated three times, no other operator has been reported as having operated more than twice. These operators have been most pains-taking and laborious in culling all essential points connected with their work, and giving them to the world. They have the satisfaction of feeling that the views they have labored to demonstrate as practical have virtually been endorsed by the American Surgical Association, the New York State Medical Association, and the Philadelphia Academy of Surgery, together with many of the ablest surgeons, both abroad and in this country.

I am aware of the fact that there have been statistics

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*Sir William MacCormack, in the annual oration before the Medical Society of London, May 1st. 1887. "On Abdominal Section for the Treatment of Intra-Peritoneal Injury," presents a nnmber of tabulated reports in regard to this subject. Amongst others, one for gunshot wounds penetrating the abdominal cavity There were 30 cases operated upon, 7 recoveries, 22 ended fatally, 1 doubtful—an average mortality of $73\frac{1}{3}$ per cent., an improvement of $3\frac{2}{3}$ per cent. over the cases reported by Dr. Morton. It is but fair to the latter to state that Sir William incorporates all of Dr. M 's reported cases in his tabulated statement.

brought forward by some of our most distinguished surgeons to prove that the conservative plan has produced as good results, if not better, as where surgical interference has been brought into play. Not having time to discuss the point in question, I will state that, however alluring these statements might prove to those practicing in civil life, they can have but little bearing upon army surgeons.

The character of the missiles used in war is larger, and the fire-arm more powerful and destructive. A penetrating gunshot wound involving intestines or other abdominal contents, will inflict infinitely more damage, in the way of contusion and laceration, than the small ball usually fired from the pistol of 22 or 23 calibre, generally resorted to in civil life. To abdominal section are we to look for the rescue of a large percentage of lives, that would otherwise perish. Whenever, therefore, it is definitely ascertained that the abdomen has been entered by a ball, or other penetrating instrument, we are, unless there are some serious contra-indications, to enter the belly and endeavor to repair the damage inflicted.

Much stress has been laid upon the rational signs that are believed to lead to a diagnosis. Shock has been declared the most constant one by the leading authors up to within the past four years; it has since been proved that it is by no means always present. In the report of Dr. Morton, previously referred to, we find marked shock in 24 cases out of 57; slight shock in 5; absent in 4; while of the remaining 24, report is silent. It is legitimate to infer that in the majority of the latter, shock was either entirely wanting, or so slight as not to be considered worthy of mention by the reporters of cases. When present, it means injury, and nothing more. The examination of Dr. Morton's tables will not sustain the distinction heretofore drawn by some of our authors, that a ball penetrating the abdomen, and not involving any of the organs contained therein, will be unaccompanied with shock, while one penetrating the intestines or other organs is necessarily accompanied by great shock. In some of the most marked cases of extensive perforation of intestine, there was absence of shock.

Tympanites over the region of the liver is an inconstant, and, when present, an uncertain symptom. It may arise from distension of the transverse colon with flatus; it may arise where there exists contracted liver with encroachment of intestine; it may arise from intestinal adhesion to the anterior wall of the abdomen in the region of the liver with interposition of intestine over its free border. It can be, and is present in a certain proportion of cases where there exists intestinal perforation, attended with the escape of flatus into the abdominal cavity.

Emphysema of the abdominal wall is another uncertain sign; it can arise from simple entrance of air through the external wound. Often it is absent where internal perforation has occurred.

Vomiting of blood is a sign of value. Appearing just after injury, it indicates a wound of stomach or the duodenum or upper portion of the jejunum. It has appeared where there was contusion without penetration.

The only definite sign is the finding of the point of entrance of the missile or instrument into the abdominal cavity. The wound should be probed with some delicate instrument, avoiding entering the cavity. Failing to reach a satisfactory conclusion, the track should be cut down upon, and make an incision sufficiently free to determine the point in question.

Where an entrance into the cavity is determined, laparotomy, for the furtherance of diagnosis, should be resorted to at the earliest practical moment. Where there is freedom from shock, the operation should be performed at once. Where shock exists, and from the accompanying symptoms it is believed the shock arises from, and is maintained by continuing hæmorrhage, an immediate operation is imperative. When decided shock is present, a certain amount of reaction is necessary prior to undertaking the operation. Statistics clearly establish one point—the earlier the operation, the better the chances of recovery; the mortality is strikingly great whenever the operation has been delayed beyond twenty-four hours. It is highly important to endeavor to rally the patient from shock at the earliest possi-

ble moment, by applying heat as is usually directed, by the administration, subcutaneously, of morphia and atropia combined, in doses sufficiently large to produce a calmative effect upon the nervous system (usually small doses meet this indication), by the administration of stimulants, when necessary hypodermically, but, above all, by the the hypodermic administration of quinia.

For several years past it has been well known to the profession that quinia, administered anticipatively, will prevent shock in capital operations. It will, in almost an equally efficacious manner, bring about reaction after the establishment of shock following an injury. I am surprised to see so valuable and important a factor relatively ignored; in our leading text books it is merely mentioned, and that is all. For its proper administration, it should be prepared in as non-irritating a manner as is compatible with holding it in solution. There are several preparations recommended, all of them valuable, but none equal to the hydrobromate of quinia prepared as recommended by Professor Gubler. The following is his formula:—

℞—Quiniæ hydrobromat.....gr. xlviij.
Aquæ destillat.....ʒiv.

M. and dissolve if necessary by heat.
Sig.: Twenty minims contains four grains.

Three injections of twenty minims each will usually be required for the first administration, to be followed in the next twenty or thirty minutes by a corresponding amount. In administering, the needle should be carried up to its shoulder, confining it to the subcutaneous cellular tissue. The solution should be forced drop by drop from the instrument as the needle is being gradually withdrawn, the last drop escaping just prior to its exit from the skin. In this way suppurative inflammation is generally avoided, which has so often proved annoying to patients. It is a matter of great surprise, to those who have not previously tried it, to find how efficacious this remedy is. It should invariably be used as an indispensable factor in establishing reaction from shock. I believe if it was generally resorted to, it would be the means of saving many patients who would otherwise succumb.

Where reaction has to a certain extent set in, the administration of an anæsthetic (preferably ether), will hasten it on, and in this way time will be gained for operating.

In the field, it is imperative to remove a patient from the line of first surgical relief, to that of the second or field hospital before attempting to operate. We have not reached the point where we can have at hand the instruments and appliances essential for operating at the immediate front, nor do I believe that it will ever be desirable. The proximity of the enemy, the din, bustle, confusion and excitement incident to battle, will all militate against immediate operation, both upon the patient and upon the operator. Hæmorrhage, if present, should be controlled, the wound dressed antiseptically, and the patient sent to the rear.

The incision should always be made in the median line, and of sufficient length to permit of the free exploration of the abdomen, and the examination of its contents. The temptation to incise in the line of the wound is great; but when we remember that the principle lesions may be on the opposite side of the abdomen from that of the point of entrance, that we will most probably encounter blood, and may have fecal extravasation, a central line becomes absolutely necessary. Systematically, and in regular order the parts must be critically examined. Where hæmorrhage is apparent, the bleeding point or points must be sought and secured. Inch by inch the alimentary track must be examined, commencing with the stomach, and proceeding downward in regular order. This is best accomplished by drawing the small intestines without the abdomen, and enveloping them in towels wrung out of hot water, which, in some way has been disinfected, preferably with a three per cent. solution of boracic acid. The maintenance of the normal temperature of the bowel is important as one of the means of warding off surgical shock. When the examination of the bowels has been completed, the remainder of of the abdominal contents should be systematically gone over, until all lesions are discovered and arranged for repair.

There is one thing to be kept uppermost in the mind.

All manipulation within the abdomen is to a certain extent harmful; therefore search for the track of injury, and when certain that you have inspected all injured parts, desist from further investigation.

There is another thing to be remembered: The ball is not often found; it generally buries itself in some out-of-the-way place; hence it is well not to be too industrious in pursuit of it.

Where the stomach or intestine is found perforated, the wounded margins (if necessary), must be trimmed, and the wound closed by means of Lembert sutures, placed about one-eighth of an inch apart. Be careful to turn in the serous surfaces uniformly to the extent of one and a half to two lines, as the indications may require. The needles to be used in making these stitches are the ordinary small sized sewing needles, with prepared silk of corresponding size.

In making the Lembert stitch, the needle should be made to pass through the serous, muscular and sub-mucous fibrinous layers, being careful not to include the mucous membrane proper, in order that leakage may be avoided. The penetration of the submucous membrane is deemed important, as it has been found to be the toughest and most resistant of the three membranes above referred to. Care should be taken not to tie the siitches too tight, for this is a frequent cause of gangrene. After the wounds have been closed they should be dusted over with iodoform.

Where the small intestines have been perforated in several places in juxtaposition, it may become necessary to excise a portion of the intestine. The removal by Baum of 137 centimetres of intestine, from which the patient recovered only to die at the end of six months from progressive emaciation, shows there is a limit to exsection. Dr. Gunn reported a case of an insane woman, at the last meeting of the American Surgical Association, who, with a pair of scissors, cut into her belly, drew forth a portion of a small intestine, and cut off eleven inches thereof.; through surgical interference she made a good recovery. Surgeons at the present time do not think it is safe to cut off more than

twelve inches of intestine in one section. When the perforations are so numerous as to require a more extended removal than this, in order to include the whole of the injured parts, it is deemed more prudent to resect in sections. When the operation is required, the injured intestine must be drawn out of the cavity, and placed upon a sponge or towel in order to prevent the escape of feces into the abdomen. Some of the clamps at present in vogue, such as Rydygier's, Treve's, Tremain's (modified pin clamp), or others can be used, but the hands of an assistant are generally to be preferred.

In performing the operation due attention must be given to securing proper arterial distribution at the terminal ends of the excised gut. To prevent kinking, a V shaped portion of the mesentery must be cut out, remembering to leave free margins of at least one-eighth of an inch, in order to aid in securing proper nutrition of the parts; and so soon as hæmorrhage is arrested, the cut edges of the mesentery must be carefully united by means of interrupted sutures. At the mesenteric border the first stitches should be inserted, as this is the most difficult point to procure perfect coaptation of serous surfaces. As many as three sutures at this point are usually required; a fourth stitch should be placed directly opposite the insertion of the first; then two intermediate stitches between the first and fourth, to be followed by stitches placed at intervals of one-eighth of an inch apart, until the terminal ends of the intestine are brought into complete apposition, thus rendering leakage impossible. In bringing the serous surfaces together, one must see that they are regularly and evenly cuffed, about three lines being turned in, the tendency being to a gradual increase of the respective folds as the operation progresses. The Lembert sutures bring the serous surfaces in contact, adhesive inflammation sets in within a few hours, and in the end the stitches and any cast off portion of the bowel pass into the lumen, and are expelled per anum.

The treatment of the liver, spleen, bladder, etc., when wounded, must be conducted upon the principles, and by following the details so carefully and accurately set forth

by Nancrede and others in their published articles. The wounding of the splenic or renal arteries will demand the removal of those organs; unfortunately death usually takes place from hæmorrhage before operative relief can be rendered. Wounding of one of the ureters will likewise demand extirpation of the kidney upon the affected side. Should the mesentery or omentum be found wounded or contused, the injured section must be excised, and the parts carefully brought together with interrupted sutures. This is required to prevent the escape of blood into the abdominal cavity, or the throwing off of a slough. In this way we prevent sapræmia upon the one hand, or diffuse peritonitis on the other. In returning the abdominal contents, great care should be taken that they are restored as nearly as possible to their original anatomical relations the one to the other. As adhesive inflammation is likely to take place, and agglutination to contiguous parts occur (for the time being), one can readily conceive how great danger might arise from mal-position of these parts.

The toilet of the peritoneum *during and at the completion of the operation, demands the utmost care and the strictest observance of all essentian details. The healthy peritoneum, as has been so interestingly shown by Wegner and Grawitz, is capable of disposing of a large quantity of foreign or noxious material. Serum, feces, urine, bile, etc., are all capable of being absorbed by it. When, however, the peritoneum is injured from shot wound, the abdominal contents in a state of congestion from shock or injury, one or both, the state of affairs is anything but favorable for the removal of foreign materials, which, if permitted to remain in the cavity, will give rise to sapræmia or peritonitis. The establishment of either of these conditions will almost necessarily lead to a fatal termination. Clinical experience has taught us that in order to avoid these dangers, absolute cleansing of the abdominal cavity of all foreign material is indispensable, prior to closing the same. The drainage

*This has been fully demonstrated by Warren, of Boston, through experiments upon dogs, as set forth in a paper read by him before the American Surgical Association at its last meeting, May, 1887.

tube should not be used when it can be avoided. The pouring out of a large quantity of any of the irritating materials previously referred to, the fear of recurrent hæmorrhage or the transudation of serum after closing up the abdominal cavity, should cause us to put in a tube for a few days, or until it becomes apparent that the original cause has been removed.

During the operation, if it becomes evident that the patient is passing into shock from any cause, the pouring of large quantities of sterilized water, elevated to a temperature of 100° to 110° will prove of great service.

I have not deemed it necessary to go into the various details regarded as essential for carrying out the laws laid down for the procuring of perfect antisepsis, as they have been so thoroughly discussed in our text-books; nor for a kindred reason into the manipulative details for opening, closing, and dressing the abdomen.

ART. IV.—**Remarks on Glaucoma, with Report of an Interesting Case.** By ROBERT L. RANDOLPH, M. D., Secretary Section of Ophthalmology Ninth International Medical Congress, Assistant Surgeon to the Presbyterian Eye and Ear Hospital, Baltimore, Md.

It is curious in looking into the history of glaucoma to see how the physicians of olden times regarded this disease, how theories have constantly changed since their day, and how, notwithstanding the light that the discovery of the ophthalmoscope has thrown upon its objective symptoms, still the pathology of glaucoma is almost as much a matter of speculation as ever. Hippocrates and his cotemporaries observed the condition, but made no distinction between it and cataract, regarding it as an affection of the crystalline lens. Later on Brisseau, of Paris,* advanced the idea that it was a disease of the corpus vitreum, and this theory prevailed extensively among ophthalmologists during the greater part of the eighteenth century. There was a time

* Traite de la Cataræte et du Glaucome. Paris, 1709.

when glaucoma was looked upon as a disease of the optic nerve, and again as a retinal disease. Mackenzie, in 1830, was the first who appeared to apprehend the actual condition of the eye, in noticing the increased tension; and said that the remedy for the disease lay in finding some means for lessening this tension. It was he who explained the increased tension by suggesting the existence of increased fluid in the eye, and who practised relief by tapping the corpus vitreum. A. von Graefe, through the aid of the ophthalmoscope, years afterward observed still other striking peculiarities, namely, the excavation of the optic nerve and the pulsation of the arteries, symptoms which undoubtedly have their origin in increased intraocular pressure. He thus added stronger evidence in favor of Mackenzie's theory. Anæsthesia of the cornea and paralysis of the iris were also noted by Graefe, points which every oculist has now-a-days learned to observe. It was he who first employed iridectomy in the treatment of glaucoma—an operation which is now universally acknowledged to be the only course to pursue; an operation whose beautiful results are most forcibly illustrated in the acute primary forms of the disease, where, when performed seasonably, it will as a rule restore sight completely.

Iridectomy is indicated in all forms of glaucoma, for even in the chronic inflammatory forms some portion of the sight is restored; and there is always a possibility, indeed a strong probability, that with time decided improvement will show itself.

In *glaucoma simplex*, however, it simply stops the progress of the disease and preserves what vision is left.

Until von Graefe's discovery all treatment had absolutely no significance. Not more than thirty years ago Desmarres in his text-book begins his discussion of the treatment of glaucoma with the following words: "Le glaucôme étant incurable il devient très difficile de poser les bases d'un traitement,"—in other words, practically, no treatment. Had Graefe made no further contribution to ophthalmology, this one achievement would have made him immortal, and would

have placed him among the very few who have been benefactors, not to a nation, but to humanity.

How does iridectomy bring about relief? It does so by lowering intraocular pressure, the goal towards which Mackenzie many years before had said that all investigation must be directed. And how is intraocular pressure lowered through iridectomy? Is it the corneo-scleral wound, or the evacuation of the contents of the anterior chamber, or the excision of the iris, or all three factors in conjunction that bring about this result? If the cause of the glaucoma is to be sought in the rigidity and unyielding quality of the sclera—a most frequent condition—we might say that the corneo-scleral wound was the active agent; for by the interposition of new tissue between the two edges of the wound the capsule of the bulb gains something in width, and as a consequence space within is gained. If the cause is assignable to hypersecretion as a result of nerve irritation—and we not uncommonly have a great deal of nerve irritation in acute glaucoma—by the evacuation of the contents of the anterior chamber we can relieve the disturbances in the circulation caused by the increased blood pressure, and at the same time pave the way for the restoration of the vessel walls to their normal condition by getting rid of the cause to which the changes in these vessel walls were due. Furthermore we know that excision of the iris has brought about cure, for in cases where sclerotomy oft repeated has effected absolutely nothing, cutting out a piece of the iris has accomplished the desired end.

Circulatory changes appear to possess great significance in the etiology of glaucoma, for we meet with the disease most often in those who are on the decline of life and where the energy of the heart and the elasticity of the vessels are not what they were in early days. With changes in the circulation I may mention the occurrence of glaucoma in women at the climacteric. The influence of *heredity* as a predisposing cause to glaucoma is unquestioned. Arlt, of Vienna, speaks of two sisters blind from glaucoma whose mother also lost her sight from the same affection; further of a woman whose mother, and again of a man whose father and

two brothers had become blind from glaucoma. Almost any *physical excess* may act as an exciting cause for an outbreak. There are cases on record where violent *mental excitement* has brought on an attack. Schmidt in his monograph on glaucoma* quotes the following case in point and describes it in the language of Fisher in whose practice it occurred:

"A very distinguished lady, sixty-six years of age, and noted among her acquaintances for her brilliant social qualities, was passionately fond of card-playing. Whenever she was the loser, although apparently calm, she would expend her vexation in convulsively pinching her thighs with her fingers, and the number of blue marks on her limbs would pretty accurately indicate the degree of her anger. I ascertained this remarkable fact while investigating for the cause of the disease, as glaucoma had developed itself very suddenly in the left eye. At my urgent request she gave up cards. Many years afterward she was persuaded by a friend to play again. She lost heavily, went to bed at midnight, and awoke never to see again. On being called early in the morning I found the other eye, which was before perfectly sound, blind from glaucoma."

The *patholygical history* of glaucoma is rich in theories, theories whose aim has been to account for the increased tension; for in the solution of this problem is, without doubt, to be found the true pathology of glaucoma. Donders says that it is dependent upon the condition of the nerves governing the secretion of the intraocular fluids, so that the cause of the trouble may lie without the eye. Weber says that it is due to pathological changes in the tissue about the spaces of Fontana and the canal of Schlemm, changes which hinder the egress of intraocular fluids. Recent investigations of German pathologists seem to point to disturbances in the choroidal circulation as being the source from which the disease arises. It is a well-known fact that we have dilatation of the veins of the choroid in glaucoma and consequent thereupon of course a slowed blood current. We would naturally suppose that these two conditions would lead to increased transudation, or a pouring out of the wa-

*Graefe und Saemisch Haudbuch der gesammken Angen heilkunde, Vol. V.

tery elements of the blood into the corpus vitreum; hence the hypersecretion, and, as a result of this latter, the increased tension.

Whatever be its pathology, all ophthalmologists consider that glaucoma is preeminently a disease of advanced life—or in other words, that in by far the majority of cases *age* plays the chief role in its causation. According to the best statistics its occurrence before the thirtieth year is about 1 per cent. Professor Stellwag reports a case of glaucoma in a nine-year-old girl. One eye functioned normally, the other eye was perfectly blind. Laquer reports a case of glaucoma of both eyes in a child twelve years old. Glaucoma in conjunction with corneal troubles, particularly those of the staphylomatous variety, as keratoconus and keratoglobus, is not infrequently seen in young people; but here it must be regarded as secondary to the disease of the cornea and does not, properly speaking, come under the head of these remarks.

The following case is one that I reported in Knapp's *Archives of Ophthalmology**, and is, with the exception of a case reported by Webster†, of New York, the youngest on record. It simply shows that advanced age is not an indispensable factor in the production of glaucoma, and that we cannot formulate essentials for its existence which will cover the whole subject. It is easy to understand, as I have already remarked, how an old person whose circulation has probably undergone changes incident upon age and whose sclera with increasing years has become tough and unyielding, is predisposed to glaucoma. But how are we to account for the disease in a girl ten years of age, whose physical development was singularly good, whose heart's action was perfectly normal, and yet who was afflicted with the disease in question in its most typical form?

Lena G , a very intelligent mulatto girl, came to the Presbyterian Eye and Ear Hospital a few months ago. She has noticed for more than a year (she is now eleven years old) that her sight has been gradually failing. Her father ob-

*Knapp's Archives of Ophthalmology, Vol. XVI., No. 2. 1887.
†New York Medical Record, Vol. XVI., No. 16.

serves that she no longer recognizes small objects at a comparatively short distance. She has on several occasions during the past eighteen months complained of pains in the temples and forehead, but as they were transient in character they attracted very little attention in themselves from either the child or her parents. A very common symptom in glaucoma is the temporary observation of objects—by which I mean that, for a brief space, a cloud or veil hides the object from view; and again, another common symptom is the appearance to the patient of a rainbow-colored ring around a flame or gas-jet. Neither of these symptoms, however, were associated with this case. Her family history excluded the question of heredity.

Objectively I found the following: With her right eye, letters which she should see distinctly at 75 feet, she could scarcely discern at 20 feet; with the left eye, she saw at not more than 20 feet letters which the normal eye sees at 200 feet. There was marked plus tension in both eyes; indeed the left eye possessed a feeling of stony hardness to the touch. The pupils, though large and somewhat sluggish, presented besides these two diagnostic points nothing worthy of note. There was narrowing of the field of vision in both eyes, more especially in the left eye on the nasal side; and this latter symptom—narrowing of the *nasal side* of the eye of the field of vision—is peculiarly characteristic of glaucoma. Externally the eyes presented a perfectly normal appearance, as it most frequently does in this form of glaucoma—*glaucoma simplex*—where there are no acute inflammatory symptoms. The ophthalmoscope revealed transparent media and glaucomatous excavations in both eyes.

As there was no material difference in the ophthalmoscopic appearance of the two eyes, I will simply describe one: The vessels were crowded over to the nasal side of the optic nerve entrance and disappeared with a sharp bend into the depth of the excavation. The veins were enlarged and twisted. The arteries were narrow and at points near the edge of the optic papilla pulsated very beautifully. The entire papilla presented a grayish hue and the outer three-fourths were almost perfectly white. In other respects I observed nothing abnormal about the back-ground of the eye.

Professor Chisolm, who also saw the case, tells me it is the youngest he has ever seen. In a residence of a year and a half in Vienna, during the last nine months of which time

I served as an assistant in the clinic of Professor von Reuss, the youngest case of *glaucoma simplex* that I heard of and which I afterward saw was in a man of twenty-five years. Here, however, we have the process manifesting itself at nine years of age. Iridectomy was advised, but the parents being ignorant and fearing the operation, it was declined.

Clinical Reports.

Case Illustrating the Use of Cocaine Hydrochlorate in Melancholia. By I. S. STONE, M. D., Member Medical Examining Board of Virginia, etc. Lincoln, Va.

Apropos of the rather cheerful statement made by Dr. Hammond at the late session of our State Society, (see *Va. Med. Monthly*, November No., 1887, p. 608), that "one injection (of cocaine) given daily for three or four days, will often make the most dismal melancholic cheerful; and what is remarkable is the fact that the improvement is permanent," I decided to give it a trial. Accordingly, soon after my return from Richmond, I commenced treating a lady, aged 53, who had been the victim of melancholia at times for many years. She would have a slight illness, or some real or imaginary loss of friendship or money, and would then for months at a time remain, not always a *passive*, but frequently an *active* melancholie.

The first injection of cocaine was given at my office, the lady having been brought two miles for that purpose. I was careful at first to give only half the dose suggested by Dr. Hammond, and administered one-fourth grain under the skin of the left forearm. In less than two minutes the patient remarked, "I feel that medicine all over me." I saw at once that she expected some wonderful effect from the injection, and proceeded to divert her mind from her present condition to some past and more agreeable topic. I think I was quite successful, for soon she perceptibly brightened up, and her conversation grew in rapidity as it did in

interest; and I was correspondingly elated that I could even for a time bring this poor patient away from her present, back to the past and she proceeded to tell of old times, old love scenes, episodes, etc., of her youth, and of other rare secrets, which she informed me she had "never told before." In an hour she returned to her home, and the next morning informed me that the "medicine wore away in an hour after she left my office."

The next day promptly at the appointed time, the patient returned, but with gloomy and despairing manner. So I gave her one-half grain in the same arm as before. In less than five minutes she grew greatly excited, and even wildly so. In a few minutes I was obliged to remove her to a room in my house, adjoining the office, to avoid publicity. A gentleman, an acquaintance of hers, barely escaped her violent and tearful embrace as she was being hurried from the office. It is beyond my power of description to note the particulars of this woman's delirium, for such it was. More than an hour was occupied in quieting her (for I was not willing to give any drug for that purpose, as I wished to see the effect of the cocaine). After the patient returned in a measure to her reason, I was obliged to accompany her to her home, and thus I lost four of my busiest hours.

The experience of that morning prevented me from trying so large an amount of the drug again; so I gave her one-fourth grain at her home, for obvious reasons. On this occasion the result was unlike either of the previous ones. An exhilaration, lasting for two hours followed, during which she spent most of the time walking rapidly and apparently without fatigue, which she complains of almost unceasingly. Her mind was occupied busily, however, with so many other things that she forgot her tire. Thus various topics were discussed, such as bits of gossip, church matters, and other small talk were indulged in. Once, in great confidence, she told me that she meditated taking poison, but had only felt thus inclined once. She, however, bemoans her condition to such an extent as to beg for death to come to her relief.

The three following injections given were without special

effect other than already mentioned. There was always an exhilarant effect, but it was uncertain. For instance, the first injection was followed by better results than those given afterwards. Her condition is as bad since the treatment was discontinued as before; indeed, it seems worse. I have been unable to perceive any change in any of the functions, sleep, etc.; they are all poor, and will remain so in all probability until time sufficient has elapsed, when her disease usually disappears spontaneously.

I have recorded this case, not without some hesitation as to its value, but think it justifiable in view of the statement made, which caused me to try the experiment.

Ninety-seven Ounces of Foreign Bodies—such as Pieces of Glass, Brick, Rags, Peelings, Clay, etc—in Rectum, Causing Alternate Diarrhœa and Constipation, etc. By WM. F. DREWRY, M. D., Assistant Physician Central Lunatic Asylum, etc., Petersburg, Va.

Last Spring, after assuming my duties in the Female Department of the Central [Va.] Lunatic Asylum, my attention was directed to a large, robust-looking colored woman, aged 46, among the chronic insane. Upon inquiry, I learned that this woman had long suffered from *disordered* bowels—diarrhœa. alternating with constipation. The discharges, which were thin, *muddy*, and very offensive, oozed from the anus in small quantities, attended with pain and tenesmus. The abdomen was distended (apparent ascites), and deep pressure over the left iliac region elicited pain.

Was this a case of chronic diarrhœa? Many remedies and various modes of treatment had been repeatedly used to regulate the bowels, and had repeatedly failed to accomplish any good. But the pain, or soreness, in the left iliac region, the constant *oozing* and the peculiar character of the discharges led me to suspect *something* other than diarrhœa.

Thereupon, introducing into the rectum my fore-finger, its tip came in contact with a hard mass, which, upon ocular examination through a speculum, proved to be some solid foreign matter. The enlarged rectum was completely impacted with bits of *stone, glass, slate, brick, buttons, fruit-par-*

ings, clay, etc., to the amount of *ninety-seven* (97) *ounces*, avoirdupois, which, assisted by my associate, Dr. Barker, I subsequently removed—my hand being the only instrument used. No medicine, except olive oil injected into the rectum, castor oil *per orem*, and flannel cloths saturated with whiskey, applied to the abdomen, was used. The diet was restricted to milk, oat-meal and eggs. Not a single bad symptom occurred; the patient rapidly recovered, and has not since had any trouble with her bowels.

The glass, stone, slate, etc., were evidently swallowed, and upon reaching the rectum were prevented an exit by the contraction of the sphincter ani muscle, or by the large size of the mass. That they were taken by the mouth is sufficiently proven by the fact that part of them was lodged high up in the alimentary canal, and not until repeated doses of castor oil had been given, and several *operations* had been performed, extending over a period of ten days, did we remove all the offending matter.

This is one of the many instances in which foreign bodies of various sizes and weights have been swallowed by the insane, and passed *per vias naturales*. In the *London Lancet*, September, 1887, there is reported a case of an idiot boy from whose rectum were extracted quantities of pieces of slate-pencil, from one to two and a half inches long, bits of stick, pieces of rag, and fragments of wool. The boy speedily recovered.

Agnew tells us of a case of an insane woman, in whose alimentary canal he found, after death, a pair of suspenders, several skeins of silk, three spools of cotton, and two roller bandages.

Indeed, not unfrequently the insane take into their stomachs all manner of things, however incredible it may seem to a rational person. A patient in this Asylum was seen to swallow a dead rat with apparent relish. Another has long dieted on croton-bugs, wasps, and other insects. Others are guilty of the revolting habit of drinking sewerage water, their own urine, and eating their own fæces. These, and such like perverted and morbid tastes, as observed by every physician who has the insane to deal with, sometimes continue to exist despite the most strenuous efforts to correct them by means of good, wholesome foods, tonics, and moral treatment in every conceivable way.

Correspondence.

"Facts and Figures" about Chloroform and Ether Deaths.

Mr. Editor:—I regret that any portion of my paper, entitled "The Choice of General Anæsthetics in Surgery and Obstetrics," read before the Medical Society of Virginia, October 19th, 1887, and published in the November number of your journal, should have been construed by Prof. John A. Wyeth into an attack upon him. I beg leave, through your columns, to assure Dr. Wyeth, and any of your readers who may also have misunderstood my remarks, that I had no such intention. In closing my paper, I deplored, in a general way, the sometimes bitter and partizan debates seen in discussing the question of the relative value of ether and chloroform. I then stated that those who gave chloroform exclusively were often bigoted and unjust to the men who used ether; and that some of those who gave ether, as bitterly and vehemently denounced the men who gave chloroform. As an instance of the latter, I quoted the following from the last text-book on Surgery issued this year:—

"In general there is no comparison between these agents; ether is so much safer than chloroform that the latter is fast disappearing from practice. The estimated death-rate after ether is 1 in 20,000; in chloroform, 1 in 3,000; seven lives are sacrificed to chloroform to one by ether."

"Such statements," I added in my paper, "are the outcome of prejudiced brains, and absolutely unwarranted by any facts or figures known to the profession. In the discussion of a purely scientific question, the proper solution of which may involve human life, such feeling should be avoided. Let those who prefer one of these agents give to his fellows, who select the other, credit for equal honesty, and the same desire to save human life and suffering."

I was discussing and deploring a well-known fact, of which Dr. Wyeth's statement was simply an illustration. I could have selected many assertions from other authors, stronger, if possible, in language than that above quoted, but Dr. Wyeth's book was the last one I had happened to

read; and I regretted that an otherwise exceedingly valuable work should have been marred by what I considered a partizan and unwarranted statement. I had no intention of personally attacking or offending him, and am sorry to have appeared to have done so.

Dr. Wyeth's statistics, to prove that "facts and figures" do justify the statement I have copied from his book, is a good illustration of the aphorism, (Sidney Smith's, I believe), "There is nothing so uncertain as figures, save facts."

The first extract given is from Agnew's *Surgery*, and this high authority goes far to confirm Dr. Wyeth's statements; but since this book was published, Dr. Agnew has reported a case of *ether* death, occurring in his own practice. Death in this instance was due to the "rupture of a calcified vessel in the floor of the fourth ventricle, * * * increased vascular tension caused by the ether determined this tension." At the conclusion of his report of this case, Dr. Agnew says:—

"After forty years of surgical work, often, too, of the gravest character, and sometimes requiring prolonged anæsthesia, without an accident in a single instance, I had come to believe that the exhibition of ether, unless recklessly administered, was entirely free from danger. Several deaths, I am aware, have been reported, from time to time from its use, even in the hands of the most careful operators; but I never could divest my mind of the idea that in these cases there was some undetected element involved more influential in the issue than the ether, as in the present instance."

It was simply impossible to ascertain during life that this condition of the blood-vessels existed; but those who use both chloroform and ether will believe that death in this case would have been less likely to have happened under chloroform.

The next author quoted by Dr. Wyeth is Gross' *System of Surgery*, pages 548–9, Vol. I., 1882. If Dr. Wyeth wtll cast his eye over the *whole* of the pages he refers to in this great work, he will find the following:—

"In the hands of certain surgeons, the use of chloroform as an anæsthetic agent, has been attended with astonishing

success. I have now administered it in all kinds of operations, in several thousand cases without a single death, and only in three cases did I feel any serious alarm for the safety of the patient. Syme gave it in about five thousand cases without any serious occurrence; and Simpson, it is said, met with only one death in all his immense experience. Professor Nussbaum, of Munich, in 15,000 cases never lost a patient, and Billroth had no deaths in 12,500 cases. The results of the experience of other practitioners are equally gratifying. It is to be regretted that an agent, capable of conferring so vast a benefit, should be so little employed in this country, because a fatal instance, produced for the most part by maladministration, is occasionally reported; as if death in surgical operations never arose from any other cause."

"I have myself constantly used it ever since its introduction among us in 1848, believing it to possess decided advantages over ether, although its administration unquestionably requires the greater care and attention. Among the most important of these advantages are, first, the more rapid manifestation of the anæsthetic action of the remedy, the system becoming affected much sooner, as a general rule, than it does by ether; second, a smaller amount of laryngeal and bronchial irritation; thirdly, the more easy maintenance of the anæsthetic influence, after the system has once been fairly affected; and lastly, the less liability to cause vomiting and other unpleasant consequences."

Dr. Wyeth then quotes from Prof. Andrews, of Chicago, Roberts, Weir, and others, many thousand cases to prove that the ratio of mortality stated by him is correct. The *many thousand* cases in the above records show, without further argument, that chloroform is *not* "fast disappearing in practice."

If figures are to be believed in, let us look at the following statements. In Prof. Lyman's article on "Anæsthesia," in the *International Encyclopedia of Surgery*, Vol. I., page 423 (the same book and the same page from which Dr. Wyeth selects most of his statistics), we find the following:

"Dr. Chisolm (1887) estimates that during 250,000 recorded administrations of chloroform, only 12 deaths occurred." "Squibb has estimated the ratio of deaths by chloroform published in American journals at 1 to 11,704."

"In the Royal Infirmary, at Edinburgh, during a period of ten years only one death occurred in an estimated total of 36,500 administrations of chloroform."

Dr. Gross, page and volume above referred to, says Flourens testifies that in the war in the Crimea, chloroform was administered more than 25,000 times, without a single death. Dr. Geo. A. Otis reports that there were, during the late war in this country, "only eight cases out of upwards of 120,000, in which a fatal result could be fairly attributed to its use. Nussbaum has seen in military life, 40,000 administrations without an accident; and I have estimated that chloroform was given in the Confederate Army Corp, to which I was attached, 28,000 times without a death from its use. Add to all of this, the well-known fact that chloroform has been given in hundreds of thousands of cases of obstetrics, without one well authenticated case of death from its employment. So I might go on with other statements; but what does this prove? Nothing, except the truth of the old adage, more homely, but not less strong than the one already cited, "that nothing lies like figures, figuratively speaking."

All of this, however, was not the chief point in my paper. I stated in that article, "That both agents sometimes kill the patient, the most bigoted and partizan advocate of either ether or chloroform must admit." "Already between four and five hundred deaths from chloroform have been reported, and nearly, if not quite, one hundred deaths from ether, *but what the ratio of mortality of either of these agents is to the number of inhalations, we are, so far, unable to determine.*" I stated that I believed that every good surgeon should discriminate in the selection of his anæsthetic, and that those of large experience should point out what cases were suitable for ether, and in what cases chloroform should be given; that chloroform was the more powerful and immediately dangerous agent, but that when consciousness began to come back the patient was safe, so far as *its* influence was concerned; that ether was less powerful or immediately dangerous; but that when it had been removed for some minutes, the patient might die from cardiac or respi-

ratory paralysis, or hours or days after its administration he might succumb to acute nephritis or pneumonia directly traceable to the ether.

This makes true, comparative statistics of the two agents difficult to obtain. Another source of difficulty is the fact that some deaths are ascribed to the anæsthetic, which are in truth due to other causes—to the surgical operation, for instance— or to some accident, as in one reported by Prof. Agnew, where death occurred before the ether bottle had been uncorked.

It is doubtless true, as has been urged, that deaths from chloroform have not always been reported, but is it not fair to believe, that in the same ratio, cases of ether deaths are suppressed? Indeed, in the very discussion to which my paper gave rise, Dr. Oppenheimer remarked, "that all cases of ether deaths are by no means recorded. He had witnessed two deaths by this agent in New York City, one in the practice of Dr. Keith, and the other in the practice of Dr. Bryant."

Slowly, but surely we are approaching nearer and nearer the truth about anæsthetics. Already those who are not wedded to one agent, decline to give chloroform to very feeble anæmic people, or those suffering from great shock or loss of blood. They hesitate also to give it when the heart is functionally weak, or the patient is badly frightened. For these cases ether is safer. They decline to give ether when there is cardiac, renal, or pulmonary trouble, or in operations about the face and throat, or when they have reason to suspect calcification or other degeneration about the blood-vessels of the brain.

The time is not far distant when in a few rare, and very exceptionable cases, all anæsthetics will be avoided; and by the selection of the anæsthetic for particular cases, the mortality from their use will be almost nothing.

I fear the profession who have taught many communities in this country that to give chloroform is the next thing to murder, will have some difficulty there in changing public opinion.

HUNTER MCGUIRE, M. D.

Richmond, Va., December 20th, 1887.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Fluorhydric Acid in Treatment of Pulmonary Phthisis.

A communication to the Académie de Médicine by Dr. Hérard states (*La Tribune Médicale*, 27th Nov., 1887) that fluorhydric acid has been employed medicinally only a very few years, on account of its powerful caustic properties. Bastian, in 1862, first remarked that it might be useful in diseases of the respiratory organs, since it was observed that workmen who were exposed to the emanations of this acid did not suffer ill effects, and especially when they had weak chests. The first practical use of it was made upon phthisical patients at the Salpêtrière, in 1866, by Charcot and Bouchard, but without much success, on account of imperfect means of appliance. More recently, Seiler has revived this method of treatment, and with more satisfactory results. Garcin, according to his statistics, has obtained still more satisfactory results.

First of all, it should be recognized that inhalations of the acid are harmless, and the experiments of Dujardin-Beaumetz and Chéng prove without doubt that it prevents in a high degree fermentation and putrefaction. And when applied to old, fetid wounds, it causes them also to improve rapidly. The experiments of Martin prove that it possesses a powerful antiseptic and a considerable anti-bacillary action.

There are different methods of using this remedy. Bergeron allows the vapors of the acid to be liberated in the nascent state around the patient, who breathes with open mouth placed over and near the vessel in which the vapors are formed, while they fill the room, which should be close and without a chimney. Dujardin-Beaumetz evaporizes a solution of the acid in a small guerite (a kind of watch-box) made of wood, which holds the patient. Seiler makes use of a rubber inhalation apparatus. The best method is to conduct into a cabinet for the patient air which has been passed through a solution of fluorhydrrc acid, composed of 150 grammes of acid and 300 grammes of water. Patients remain one hour in the cabinet; the acid is renewed every quarter of an hour. The number of inhalations varies from 20 to 70.

As regards the amount of medicated air to be introduced into the cabinet, it should be known that it is possible to furnish the patient 30 litres of air charged with the acid to each cubic metre of ordinary air, and this is the maximum.

The first effects of this remedy are the return of appetite, cessation of sweats and of vomiting, when it exists. The diarrhœa is more rarely and much less rapidly modified. The fever lessens, and later disappears. There is increase in weight, on account of the amelioration in these symptoms. The dyspnœa is one of the phenomena which is the most quickly amended. The cough changes in character, becoming less tenacious.

As might be feared, inhalation of this powerful acid does not cause hæmoptysis. The expectoration is modified in quantity and quality. The number of bacilli in the sputa generally diminish in proportion to the general improvement in the patient. It is very difficult to obtain a complete disappearance of the bacilli, for this only takes place very slowly, and when the work of repairing the existing lesions is effective. This reparation is slow, and varies according to the extent and importance of alterations in the lungs. It is in the beginning of the disease, when the lesions are limited, that the treatment with fluorhydric acid, as with all other remedies, gives most chances of success.

En resumé, inhalations of fluorhydric acid possess an incontestible therapeutic action in phthisis, when the disease is not too far advanced. It is free from inconveniences, easy of application, and moreover can be combined with other medications, internal or external, and especially with the hygienic treatment, the essential bases of good therapeutics.

Alimentary Regimen for the Gouty.

According to Dujardin-Beaumetz, gouty persons may make use of all kinds of meats, giving always preference to the white meats. They may use, in moderation, eggs, fish, mollusks and crustaceans, and the fatty frocks. Vegetables should enter largely into their alimentation, with the exception of the sorrel and spinach, which contain large proportions of oxalic acid. The nourishing, nitrogenous vegetables, such as cabbage and cauliflower, and the feculent seeds, such as peas, beans, and lentils, may be used with caution. Bread should be replaced by potatoes. All fruits are good, and the grape cure may ameliorate the condition of some gouty persons. As regards drinks, the light Bordeaux and white wines, containing little alcohol, diluted with water, and particularly slightly alkaline water, are

preferable; but no champagne, nor very gaseous, nor strong beers, should be allowed. Very weak coffee may be given, but no tea, which contains a large proportion of oxalic acid. Keep the bowels open with the purgative mineral waters. Empty the bladder every two hours. Bathe the whole body, and practice massage and exercise in all its forms.—(*Wu. Méd.*)—*Le Praticien*, 14 Nov., 1887.

Cancer of the Larynx.

Le Praticien of November 27, 1887, gives the following report and discussion, at the previous meeting of the Académie de Médicine:

Dr. Tillaux reported a case of cancer of the larynx in a man 59 years old, who was brought to him on the 26th of June last in a deplorable condition, being very weak, with almost complete loss of voice, and great difficulty of breathing. At the level of the inferior right vocal cord there was a sanguinolent tumor, too large to be removed by the natural passages. The larynx was also increased in size. The question to be decided was, would it be better to remove the whole larynx, or to perform simple tracheotomy? He decided upon tracheotomy, reserving the radical operation in case of later necessity. Very soon after the operation, there was a great amelioration in the condition of the patient. He breathed freely, took nourishment, regained his strength, and gained seven pounds in weight. He left the hospital fifteen days after the operation, and returned to his business as a broker. He can speak if he closes the tube with his finger. The treal lesion itself is improved since the operation, for there is less swelling about the larynx, which is probably due to the condition of the rest of the organ. The result observed is analogous to that following the establishment of an artificial anus in epithelioma of the rectum. Just at present, surgeons are not in accord as to which is the better operation in cancers of the larynx—tracheotomy or excision of the larynx. The thesis of Schwartz was sufficient to convince him, and he preferred tracheotomy, which he was sure would afford a very considerable respite.

Dr. Verneuil remarked that he was absolutely of the same opinion as Dr. Tillaux, and thought that extirpation of the larynx was a deplorable operation. If the patient does not die immediately after the operation, he will succumb, sooner or later, to the generalization, and the period of survival is much less than after tracheotomy.

Drs. Richet and Hardy expressed the same opinion, and

called attention to the necessity of using a tube of sufficiently large calibre.

Dr. Labbé thought that opinions held by his colleagues were certainly rational ones, but he took exception to the statement that total extirpation of the larynx was an entirely useless operation. Statistics show that it is practiced too late. He himself had performed the operation four times, with only one failure, which was due to bad attention, the patient dying in fifteen days of an infectious pneumonia, the tube not having been removed sufficiently early to permit the blood to drain off.

Antipyrine Relieves the Pain, but not Contractile Effect of Ergot.

At the meeting of the Société de Biologie, on the 19th of November, Dr. Chouppe remarked that he had already called attention to the good effects of antipyrine in uterine colic; and that further investigation had shown that this substance prevented also the pain of the contraction produced by ergot. In a case of interstitial uterine myoma, accompanied with grave hæmorrhages, in which the administration of ergot produced terrible pains, lasting from two to three hours, antipyrine, given in 30-grain doses, by injection brought about absolute cessation of the pain in twenty minutes. When the injection of antipyrine was given soon enough to begin to act at the same time as the ergot, the pain did not occur; and the second dose of ergot, given one hour and a half later, did not cause any pain. The element of pain was suppressed, and this without detriment to action of ergot. The contractions did not diminish in intensity or duration. The point is one of importance, and deserved the attention of obstetricians.—*La Tribune Med.*, 27 Nov., 1887.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Localization of Sensation in the Throat.

Dr. Scheidewaldt, from a number of experiments, comes to the following conclusions (*Deusch. Med. Wochenschrift*, 1887, 32—*Rundschau*, Dec. 1, 1887): 1. The pathological and physiological localizations of sensations in the throat are very imperfect. 2. The perception of touch of the different organs can hardly be distinguished from one another by the patient. 3. The different sensations are all referred to one region, namely, the anterior part of the *regio laryngo-*

trachealis. 4. The proofs for this statement are (a), physiologically, by exciting the different parts with a probe; (b), pathologically, by the different causes which give rise to coughing; these are all referred to this particular part of the throat. 5. Hence, when patients complain of sensations in this part, it is well to make a careful examination in order to find the exact seat of disease. 6. Experience has taught that most generally the pathological disturbances are situated in the choana, but which the patient wrongly places in the *regio laryngo-trachealis.*

Is Tetanus an Infectious Disease?

Dr. Amon (*Schmidt's Jahrbuch*, 1887, 9—*Rundschau*, Dec. 1, 1887) was called on August 23d to attend a workman who had cut his finger very badly in a feed machine. It was not necessary to amputate, so he was treated conservatively with the most strict antiseptic precautions. The general condition of the patient was good and the wound healed well until August 28th, when on that evening violent tetanus and trismus set in, followed in twenty-four hours by death. The following day Dr. A. was called to attend a difficult case of labor, in which the placenta had to be removed by artificial means. The woman did well for ten days, when she was attacked by acute tetanus and trismus, and died five days later. On account of the rarity of tetanus in general, and especially puerperal tetanus, Dr. A. believes that, in spite of careful disinfection, he carried the germs of the first case to that of the second.

Experiments on the Etiology of Tetanus.

Drs. Rattone and Carle reported to the Med. Acad. in Turin (*Rundschau*, Dec. 15, 1887). Towards the end of 1886 a patient died of tetanus in the Hospital of St. Maurice, in Turin. Two hours after death the initial lesion and some of the surrounding tissues were cut out, from which a watery emulsion was made. One month later the fluid was examined and found to contain large numbers of bacilli and cocci. Twelve Guinea pigs were injected in various organs (nerves, muscles and spinal cord), all of which, with one exception, died in from six to eight days with all the symptoms of tetanus. From these animals pieces of the ischiatic nerve and spinal cord were taken out and again an emulsion made. Some of this fluid was injected into other Guinea pigs and all died of tetanus. In order to make these experiments distinctive, animals were injected with putrid and septic matter and strychnine, which gave entirely different symptoms at death. The experimenters conclude that—(1),

tetanus is an infectious disease; (2), an animal can be inoculated from a human being; and (3) it can be transmitted from one Guinea pig to another.

Methylin Chloride as a Narcotic.

Dr Genther believes (*Deutsch. Med. Zeitung*, 1887, 67—*Rundschau*, Dec. 1, 1887) that the reason why this preparation has not attained more popularity is because a pure article has not been used. Dr. G. has administered methylin chloride to thirty patients. In some cases the narcosis lasted more than an hour. Such unfavorable symptoms as failure of the pulse and respiration and cyanose were not present in a single case. All suffered more or less from nausea, which was most frequent on regaining consciousness. His observations lead him to believe that—1. The preparations formerly sold as methylin chloride were a mixture of chloroform and methyl alcohol. 2. This mixture even is better than chloroform alone. 3. Pure methylin chloride produces narcosis as quickly and profound as the two above-named articles, but its effects on the circulation and respiration are not so distressing, and much freer from danger than any other preparation or combination.

Saccharin.

This new preparation, to which Fahlberg has given the name saccharin, is not a carbon hydrate, but an aromatic derivative of anhydrous orthosulfamin—benzoic acid; and is characterized by its excessively sweet taste, being 280 times sweeter than cane sugar. It will never be substituted for sugar in household economy, because it possesses no nourishing properties; but for sweetening sour wines, and more especially for making palatable the food and drink of diabetic patients, it will prove very efficient. A curious fact is that ants, flies, wasps and bees will not touch it. Saccharin is also an antiseptic, and has been repeatedly used by Fahlberg in catarrh of the bladder.—*Therap. Monatshifte*, 1880, 10—*Rundschau*, Dec. 1, 1887.

Effect of Quinine on Healthy Individuals.

Prof. Hugo Schulz (*Virchow's Archiv.*, CIX, 1, p. 21—*Rundschau*, Dec. 1, 1887) gave small doses of quinine to ten healthy men (students) daily for some weeks, and carefully observed the effects. The chief irregularity was in the circulatory system, especially the blood vessels. In six of the cases the action of the heart was accelerated; in two, increased action only in the morning, returning to the normal at night; and in two there was a very marked depression and diminution of the beats. The face was œdematous, with in-

jection of the conjunctiva. On the part of the nervous system there was a feeling of heaviness and pressure on the head, then apathy; and sleep was continually disturbed by distressing dreams. There was often great pain in the branches of the trigeminus nerve. There was no variation of temperature observed in the body.

Statistics of Cancer of the Breast.

Dr. Hans Schmid says (*Deutsch. Zeitschf. f. Chirurg.*, XXVI, 42—*Rundschau*, Dec. 1, 1887): From May, 1871, to December, 1885, there were 222 cases of cancer of the breast operated upon in the Augusta Hospital, in Berlin. Out of 183 cases, there was infiltration of the lymphatic glands in 158, also 97 per cent; in 43 of these no pathological changes in the glands could be demonstrated previous to the operation. Of the 222 cases, 24 died from the result of the operation; that is, 10.8 per cent. For over three years 21 per cent., and over two years 26 per cent. have had no return of cancer. Prof Küster strongly urges that in every case the axilla should be laid open and the glands removed, and special care be taken not to injure the sub-scapular nerves.

Subcutaneous Injections of Antipyrin.

Dr. Hirsch has had most satisfactory results with the subcutaneous use of antipyrin in some cases of pains in the nerves, muscles and joints resulting from complicating rheumatism; also in one case of bronchial asthma. In all these, and some were chronic, there was immediate cessation of pain after the first or second injection. Dr. Hirsh uses a solution of antipyrin and water, equal parts, the dose being one-fourth to one-half of a Pravaz syringe. He has never seen an abscess or induration of the skin from these hypodermic injections. The syringe is carefully cleansed in a 5 per cent. solution of carbolic acid before using each time. (Berlin *Klin. Wochensch*, 1887, 46—*Rundschau*, Dec. 1, 1887.) [Antipyrin has lately been employed hypodermatically in a severe case of lumbago with the best results.—TRANSLATOR.]

Treatment of Whooping Cough.

Dr. Weintraub has recently treated several cases of whooping cough most successfully with the following:

℞.—Muriate cocain.....gr. iv.
Aquæ amygdal.....ʒ ijss.

M. S.—Ten drops, repeated several times a day.

—(*Allgme. Med. Centralb. Ztg.*, 1887, 91—*Rundschau*, Dec. 15, 1887.

Proceedings of Societies, Boards, etc.

RICHMOND MEDICAL AND SURGICAL SOCIETY.

Continued Fevers.

The President, Dr. Hugh M. Taylor, opened the discussion, limiting his remarks to a type of continued fever with which he had met very frequently during the past six months, and which presented a good many unique features. He did not know how to classify the fever. Either he had failed to classify it where it belonged, or it was a new type, or an old type modified by some unknown condition, intrinsic or extrinsic. He had treated some twelve or fifteen cases. The uniformity of the symptoms was very marked, and the cases much more like each other than like typhoid, typho-malarial, bilious, simple continued, or any other form of continued fever with which he is familiar. No age seemed exempted. His cases included children, adults, and the old. No one part of the city seemed more exposed than another. In widely-separated sections cases occurred, where the hygienic conditions were of the best and worst. The peculiar features were the high temperature, ranging from 102° to 104°F., the slight morning remission, the sudden onset of the fever, its long continuation, a marked contrast between the high fever and the slight systemic depression, and a total absence of gastric, intestinal, or cerebral disturbance. In but one case was there gastric disorder, and he thought in that case it was probably produced by injudicious use of quinine and antipyrin in his anxiety to reduce the alarming high temperature. Most of the patients were able and willing to take milk, eggs, broth, etc.; and in most of them he was surprised to note how perfectly digestion was accomplished with so much fever. The tongue had not the dry, cracked, coated look of typhoid and other serious fevers; it was not more coated, in some cases, than is seen in a simple disorder of stomach, or in a bilious attack. In none of the cases was there a tendency to diarrhœa sufficiently marked to attract attention; and there was absolutely no tympanites and no noticeable tenderness, and no symptom of abdominal lesion. In not one case was there the slightest approach to delirium, no cerebral sluggishness, nor undue activity.

The case of a young tobacconist, recently attended in consultation with Dr. John Knox, was as typical as any, and presented the following points of interest: From the start

the fever was very high, reaching 104° within the first three or four days, and for three or four weeks it ranged from 102° to 103° and 104°. The patient's intellect was so active that he studied and remembered the reading of the thermometer from day to day, appreciated the significance so well, and was so often very much depressed by the slight variations that he had to be refused the use of the instrument. His tongue was slightly coated at first, but it soon assumed a good appearance; his stomach at first was weak; he had a hacking cough and slight soreness of the throat; but a little careful dieting, etc., soon restored his digestive powers, and well-formed fœcal actions were the rule. This slight gastric disorder was the only evidence of impairment of the digestive or assimilative functions. In this case the fever continued high until the fourth week, when it gradually declined to 99° or 100°. Just at that point in the case his attending physician concluded to give him quinine; and it is a curious coincidence, if not a consequence, that his fever immediately jumped back to 104°. This following the administration of twenty-five grains of quinine for two days affirms Dr. Taylor's experience—that quinine, antipyrin, etc., were not well borne in any of the cases observed by him. In conclusion, he traced the distinctive points between the fever presenting the peculiar features narrated and those common to typhoid, typho-malarial, remittent, or bilious-remittent and simple continued or ephemeral fevers. It certainly was not like the typhoid fever, with delirium, active or sluggish, tpmpanites, diarrhœa, and the pathognommic tongue, and evidences of anatomical lesions in the belly. The long-continued high fever, with slight remission, was the only symptom in common with typhoid fever. If it is a modified form of typhoid fever, its clinical manifestations were so much changed by the modifying cause, that it lost most of the common symptoms. In but one case were there symptoms to justify a suspicion of a malarial complication; while the duration of the fever, absence of icterus, etc., left little similarity to bilious remittent, and simple continued fevers. He could only conclude that a poison of an unknown nature produced, directly or indirectly, a serious disturbance of the thermic centres, and a fever, the proper classification of which he would like to understand.

Discussion.—Dr. Edward McGuire had seen some cases similar in character to those referred to by Dr. Taylor. He thought it was an unusual form of continued fever, but did

not know exactly with which class of continued fevers to classify it; but it could not correctly be classed with typhoid fever, unless we admitted the occurrence of some very positive modifying cause. He did not think antipyretics, such as quinine, antipyrin, antifebrin, etc., had the least effect in modifying the intensity or duration of the fever.

Dr Wm. Grébé remarked, that his observations in regard to different kinds of fevers this year, from March up to this time, are as follows: In March and April he saw several cases of intermittent fever, which assumed the character of neuralgia of the trigeminal nerve, appearing soon in the morning, and disappearing towards evening; small doses of quinine cured this fever. During the summer months several cases of malarial fever, and in the latter part of July and in August a case of typhoid fever came under observation. The former resisted the use of quinine, and lasted about four weeks. The case of typhoid fever occurred in a woman 26 years old, nursing a child. She was at first attacked with an intermittent fever, which disappeared after the use of quinine. Two weeks afterwards she had a remittent fever, which was treated with quinine also, and disappeared. Some days afterwards he found the patient with all the symptoms of typhoid fever, dry tongue, diarrhœa, the characteristic eruption on chest and abdomen, delirium and tympanites with a temperature in the morning of 102°, and 103°, 104° towards evening. The treatment was very simple; every night a warm strong mustard foot-bath, and small doses of Dovers powder; during day a turpentine mixture; as nourishment, milk and beef tea and about a tablespoonful of cognac every four hours. About the 15th day, a sediment in the urine appeared which indicated a crisis in the disease, and from that time the fever subsided gradually. Snake-root tea was used during re convalescence, and this old remedy improved her condition a great deal; after eight weeks, the patient was well again. It is his opinion that typhoid fever in this country is in general milder than in other countries, as for example, in Germany; it is here more an endemic disease than in Germany. It appears in Germany as a very contagious and dangerous epidemic disease, it attacks particularly young robust persons of both sexes, and many die from it even under the best treatment, and the most favorable circumstances. He remembers that near his fathertown an epidemic of typhoid fever broke out once in the month of November, and lasted about three months; many people died from it, and five physicians who

had attended such patients one after another, fell victims to this terrible disease. A second epidemic of typhoid fever broke out in 1856 in his fathertown, which lasted several months and killed many people. In regard to the fever of the present time, he has four cases under treatment now. Children respectively 3 and 4 years old have a high fever complicated with cough and affections of the ear towards evening and through the night; these cases are intermittent fever, as the children have no cough and fever in the day. Some doses of calomel and quinine were successfully used in these cases.

Dr. Wm B. Gray said he was now treating a case of fever which presented some remarkable features. The patient is a lady 13 years of age; the fever is entirely absent during the day, but at ten o'clock at night the temperature ranges from 103° F to 105°. After two weeks, the temperature was about the same during the twenty-four hours. He gave antipyrin in five grain doses, and repeated it in an hour, if the temperature was not reduced to 100° F. and with most satisfactory results. Taking advantage of the low temperature always produced by antipyrin, he gave quinine liberally and thought well of it, though the patient had a six weeks' spell of fever, from which she has, at date of this report, perfectly recovered however. He spoke in praise of antipyrin in fever cases, after quite a large experience with the drug.

Dr. Thos. J. Moore, did not think we should attempt in our present stage of information, to draw sharp lines of distinction between the different forms of continued fever common in Virginia. As we pass from the Piedmont section of this State, where typhoid is common and intermittent is rarely, if at all met with, to the low lands of Eastern Virginia and of the Carolinas, we would find more and more distinctly, each step, the impress of the marsh malarial fevers, while the typical typhoid fever of the mountains as progressively lessened. Between the two remote sections of this State, as also of the Carolinas, there is probably an intermediate section, which includes this city, where there is a blending of the two types of fever, causing what is well named typho-malarial fever.

Dr. Landon B. Edwards said his views regarding the cause of typho-malarial fever had undergone a change. He had at one time thought it a distinct type. Typhoid fever, in its purity in mountainous regions, cannot be due to sewer gas, etc., in the sense in which city doctors all over the world apply the term, for there are no such dense popu-

lations there to pollute the surface and water streams, and no such household sewers. As we speak of marsh miasm producing intermittent fever, so we may speak of mountain miasm producing typhoid fever. And in sections where these two distinct types meet—each or both having an influence in making an impression on the fever germ—sooner or later a hybrid form of fever is the result, appropriately named typho-malarial, just as we have the mulatto as the result of the too intimate relationship or amalgamation of the white and negro races. He thinks well of the proper uses of antipyrin and antifebrin in giving comfort to the patient, but it does not cure typho-malarial fever. Bilious remittent fever is a very different disease.

Dr. C. W. P. Brock thinks the manifestations of a fever are modified by the individual peculiarities of the person in which it develops and by his surroundings.

Operative Interference in Gun-shot Wounds of the Abdomen.

Dr. Thos. J. Moore read a paper on this subject which is published in full in this issue (see page 760.)

Dr. Hugh M. Taylor thought when we recall the fact that more than 90 per cent of the cases of gun-shot wounds of the belly with visceral lesions die; that Dr. Otis (*Med. and Surg. History of the War*) questions if there is an incontrovertible case on record of recovery from such a wound; that more than 90 per cent of laparotomies for ovariotomy, Battey's operation, etc., recover, he thought there was no longer room to doubt as to the propriety of operative interference in gun-shot or other wounds of the belly with visceral lesions. While this point was settled beyond all question, there were other points in connection with this subject, which were not so well settled, and which yet claimed serious professional thought, such as the differential diagnosis between a penetrating and non-penetrating wound with and without visceral lesions, the most appropriate time for operative interference and the details of the operation. A discussion bringing out all the known facts, and upon these points in this subject was, he thought, of the utmost importance. In regard to the question of diagnosis, he could not add to what has been said in the text books and journals. He thought we were called upon to operate as soon as reaction set in, and he thought the good of the patient was considered when he operated after waiting a reasonable time for reaction, and even where there was some doubt as to the existence of penetration and visceral lesions.

Dr. L. B. Edwards referred to the value of hot water

poured into the peritoneal cavity as a remedy for shock in cases of laparotomies, etc.

Dr. Ben. Harrison had recently assisted in a case of hysterectomy in which hot water poured into the belly, he thought had saved the patient from fatal collapse. She was almost pulseless, cold, clammy and apparently dying, and twice during the operation she was brought out of this condition by the use of hot water. To him it was a remarkably clear demonstration of the very great value of this remedy, in shock during abdominal section.

Officers for 1888, &c.

Dr. Thos. J. Moore, President; Drs. Joseph A. White and M. A. Rust, Vice Presidents; Dr. C. L. Cudlipp, Secretary; Dr. M. D. Hoge, Jr., Treasurer; Dr. Ben. Harrison, Librarian. Place of meeting, Schiller Hall, 608 E. Broad Street, at 8 o'clock, every second and fourth Thursday nights of each month.

Analyses, Selections, etc.

Buffalo Lithia Waters [Va.] in the Treatment of Diseases of the Nervous System.

G. Halsted Boyland, M. D., M. A., late Surgeon French army (decorated), and late Professor of Surgery in Baltimore Medical College, etc., gives so excellent a resumé (*New York Medical Journal*, August 20, 1887) of the established medical virtues of these celebrated Virginia waters that we reproduce his article almost in its entirety, omitting simply the tables of analysis of the three Springs, which can be found in most of the advertisements of the springs:

There is no physiological process that is not executed either directly or by reflex action by the nervous system—waking, respiration, deglutition, walking, sleeping; in a word, life itself begins and ends in the medulla oblongata. It is not necessary to look beyond the par vagum to observe the great variety of physiological functions and far-reaching psychical influences exercised by a single nerve. The deduction naturally drawn therefrom that the majority of diseases are referable to derangements of the nervous system, be it through the plexus affected, the sympathetic, or the cerebro-spinal system, is fully established by pathology.

Almost all morbid changes thus find their origin in a

neurosis. Neuroses dominate pathology. A remedy therefore suitable to diseases of the nervous system in general—such as neurasthenia, hyperæsthesia, chorea, neuralgia, neuritis, dyspepsia, amenorrhœa and dysmenorrhœa of nervous origin, impotence, sterility and hysteria, cerebral hyperæmia and anæmia, melancholia, paralyses, and cephalalgia—is one to commend itself to the neurologist as well as to the general practitioner. Such an one there is provided by nature in the waters of the Buffalo Lithia Springs of Virginia, a remedy which, independent of drugs and medicines, has alleviated all cases of such character in which it was prescribed, cured many, and been successfully exhibited whenever a revitalizing of the nerve-cells was indicated. Dr. Hunter McGuire was the first to direct attention to the reconstituent powers of the Buffalo Lithia waters. In speaking of Spring No. 2, used in cases of nervous dyspepsia caused by mental overwork, and to quote from his article on the subject: "It has never failed me as a powerful nervous tonic when I have prescribed it as such. I sometimes think it must contain hypophosphites of lime and soda."

The writer, who has had a large experience in the treatment of diseases of the nervous system by these waters, extending over a period of four seasons as resident physician at the Buffalo Lithia Springs, is decidedly of opinion that their chemico-physiological action is analogous to that of the hypophosphite compound, as mentioned by Dr. McGuire. In confirmation of this, Dr. William A. Hammond writes that he has for some time made use of them in cases of affections of the nervous system, stating that his results have been eminently satisfactory, and that he often prescribes Buffalo Lithia water "in those cases of cerebral hyperæmia resulting from mental overwork in which the condition called nervous dyspepsia exists, and generally with marked benefit."

As the limits of a single article forbid the introduction of long lists of cases in detail, it will be impossible to do more than briefly refer to one or two out of some thousands, either treated by myself or that have come under my own professional observation. Cases 1 and 2 are selected as being typical of their class of nervous affections:

Case 1. *Atonic Dyspepsia.*—Mr. A. presented the following symptoms: Pain in the epigastrium after eating, anorexia and dyspnœa of many years' standing. This patient had been under treatment all that time, the remedies exhibited

not only having failed, but also left the gastric membrane in a state of chronic engorgement, involving the glands. He drank from six to eight glasses a day before meals of Spring No. 1 during a stay of six weeks at the Springs, at the end of which time all of his distressing symptoms had disappeared; he could eat freely of dishes previously proscribed without post-prandial malaise, pain, or dyspnœa, and returned home completely restored to health.

Many other cases of atonic dyspepsia have been treated in the same way with uniformly similar results.

Case 2. *Neurasthenia.*—This patient had likewise been under treatment, having taken quantities of drugs and elixirs, such as strychnine, iron and quinine, phosphide of zinc, belladonna, etc. His condition was one of emaciation, lethargy, cerebral exhaustion, and melancholia, with torpidity of the bowels and liver. Spring No. 1 was prescribed, two glasses three times a day before each meal. After six weeks of this treatment at the Buffalo Lithia Springs he was able to take regular exercise and enjoy his meals, having gained several pounds of flesh. This patient was seen by me some months later; there had been no return of the melancholia, and his cerebral activity was fully up to the average.

I now prescribe this water freely in all cases where loss of nerve-force and want of tone are present without further classification of the malady. That Spring No. 2 is equally beneficial in properly-selected cases, has been well established in my own practice as well as in that of many others, among them that of the late Dr. Harvey L. Byrd, in whose opinion Spring No. 2 was a general nerve-tonic and restorative, and he strongly recommended it to a very large class of sufferers as a nervous exhilarant, having used it with eminent success in most nervous diseases, especially those where depression was a prominent symptom, when there was nothing to contra-indicate its exhibition.

In neuralgia, cephalalgia, and cerebral hyperæmia, as well as in cases of general hyperæsthesia of the nervous system, the water of Spring No. 2 is chiefly indicated, and where anæmia exists, that of Spring No. 3 as an adjuvant, on account of its strongly chalybeate property, which it possesses in the most desirable form for administration—namely, the carbonate of iron. It will be found very serviceable in these maladies taken in quantities of a wineglassful to four ounces (twenty minutes after meals), according to the nature of the case, whether the anæmic condition is cerebral or general. The same rules apply to their administration in neuritis of the sensory nerves.

The benefit to be derived from the use of the Buffalo Lithia waters in paralytic affections—such as multiple degenerative neuritis of the motor nerves, chorea, paralyses of the rectum and bladder, and paralysis of the facial nerve—has been attested by numerous well-authenticated cases, apart from my own. I have found them especially valuable in facial paralysis and hemiplegia; in the two last-named diseases Spring No. 1 exercises the greater therapeutic potency. In hemiplegia the patient, while using the water internally, should also douche the paralyzed parts with it at the temperature at which it is taken from the Spring. Its action in multiple degenerative neuritis of the motor nerves is manifested during a course of the water by a diminution of the muscular contraction at times present, and a return of reflex and electrical conduction, thereby preventing the paralyzed muscles from becoming atrophied.

When exhibited in cases of paralysis of the bladder, tone is imparted to the organ generally; the muscular coats are strengthened and incontinence of urine is checked. In chorea, the water of Spring No. 1 acts directly upon the inhibitory nerve fibres, exercising a steadying power and causing a gradual disappearance of that tremulous condition known as paralysis agitans. In a communication to the *Virginia Medical Monthly*, February, 1878, Dr. M. H. Houston, after observation of the action of Spring No. 2 in numerous cases in his practice, and alluding to its virtue as a powerful and permanent nerve tonic, says of its employment in paralysis of the rectum that its effects in improving and restoring the organic sensibility of the entire intestinal tract were strikingly illustrated in one of his cases. Under a continuous use of the water the sensibility was restored to a considerable extent, tonic contraction of the paralyzed bowel took place, and its contents, which it had before been necessary to remove by mechanical means, "were expelled, with very slight assistance, from the use of simple water."

Locomotor Ataxia.—In a case of tabes dorsalis sent to these Springs for treatment by the waters, and occurring in the practice of Dr. Landon B. Edwards, the attending physician, the improvement was so notable that when the patient returned to Dr. Edwards he would have been inclined to doubt the correctness of his diagnosis had it not been for the fact that this had been previously fully established in consultation, several eminent *confrères* concurring in the opinion that the case was one of true sclerosis of the posterior columns. The therapeutic action of the waters in this

instance was unquestionably exercised upon the nerve centres in just the same manner as in cases of multiple degenerative neuritis, or as it would be in affections of the anterior horns. They would thus seem to be indicated in all forms of spinal paralysis.

Hysteria.—I use the term in its broad sense, including hysterical attacks and sensation, hystero-epilepsy, reflex mental disturbances, cephalalgia, nausea, and vomiting—a neurosis and yet only a symptom, for which, in the majority of cases, the uterus is responsible, in the opinion of Dr. Graily Hewitt. This conclusion, however, is not shared by the latest writers on hysterical affections, and among them Professor Charcot, who adopts the view that the ovaries are the real cause of manifestations of this nature. It is, however, my purpose to deal with the subject clinically only, and to accept the condition as presented in practice. Experience has led me to the belief that hysteria is rather a symptom than a disease, and, whether attributable to the uterus or ovaries, or in some cases to both, certain it is that this condition rapidly ameliorates under treatment by the Buffalo Lithia water of Spring No. 1 in those cases [and they are many] in which faulty innervation of the uterus and ovaries is the *fons et origo morbi.* To prove that hysteria is only a symptom, we have but to follow the pathological process one step farther, and we observe this same deficient innervation finding expression in the different flexions and versions of the uterus, dragging now one, then the other, sometimes both, ovaries out of position, whether the displacement is antero-posterior or lateral. This hystero-neurosis is most frequently met with in derangements of the catamenia, notably in amenorrhœa and dysmenorrhœa.

My friend and colleague, the late Dr. J. Marion Sims, who had used the water of Spring No. 2 in his very extensive gynæcological practice for two years prior to his death, found it highly efficacious in such cases. This has been the experience of many others in the treatment of diseases of women, whether organic or functional, the prescribed quantity acting directly upon the nerve-centres of the pelvic viscera, imparting through them strength and tone to the muscular layers and to the round and broad ligaments, thus enabling the uterus to resume its proper axis and to derive the necessary support from its appendages, which now retain it *in situ.*

The waters also regulate the menstrual flow in much the

same manner that digitalis regulates cardiac action. In dysmenorrhœa the excessive discharge is lessened in quantity and the ovaralgic pain alleviated; in amenorrhœa the appearance of the catamenia is brought about at the regular interval of twenty-eight days, not only in cases where the menses have been suppressed temporarily, but also in those in which they have been entirely absent for a protracted period. We have here the same neurosis, causing in one case dysmenorrhœa, in another amenorrhœa, according to the idiosyncrasy of the individual patient, an illustration of the physical phenomenon that the same cause produces different effects; the same neurosis productive of different pathological process. The nerve-cells are revitalized under the influence of the waters, the cause is removed, and the effect ceases. The majority of my own cases of this class were treated with Spring No. 1, which also possesses, in common with Spring No. 2, but to a greater degree, decided aphrodisiac powers.

Impotence and Sterility.—In numerous cases of loss of sexual power and sterility, treated with the water of Spring No. 1, as well as in cases of absence of orgasm, in both the male and female, there was a return of erotism, the sexual appetite was restored with normal function, and in several cases of sterility patients bore children at term. In some of these cases iron, cantharides, aloes, damiana, nux vomica, phosphorus, and electricity had been resorted to without benefit. In this class of cases the waters of Springs Nos. 1 and 3 combined will be found most serviceable, prescribed in the manner above mentioned.

It will be seen from the foregoing that there are three springs comprising the group known as the Buffalo Lithia Springs, and designated respectively by the Nos. 1, 2 and 3. It is evident that each case must be properly selected and the spring suitable to each individual patient carefully chosen from the symptoms, *or, in the absence of these, from the dyscrasia.*. During treatment tea and coffee should be avoided, as well as all stimulants and acids, the latter exercising a special deleterious influence in nervous subjects, apart from causing molecular and chemical changes by neutralization of the alkaline constituents of the waters. These, for obvious reasons, should only be taken when the stomach is in an alkaline condition—viz., one hour before meals, with the exception of Spring No. 3, as noted. We possess, then, a remedy that may be used not only *ab initio,* but one which will prove grateful to the stomach in patients that have

taken drugs *ad nauseam*, spent many painful moments of instrumentation on the operating table, and languished for months under the wearing routine of ordinary gynæcological practice. It will be readily conceded from the foregoing that the Buffalo Lithia waters merit a prominent place in the therapeutics of diseases of the nervous system, both as a quasi-specific and as a general nervine tonic—properties that distinguish them from all other mineral waters known to science. The relief obtained from the exhibition of drugs and electricity in these maladies is too often ephemeral. That afforded by these waters is more radical and permanent, being based upon molecular change throughout the nervous system, which in its turn alters the diathesis, and thus removes those neuroses from which diseases originate.

Diseases of the Nose.

Dr. W. S. Kendrick, of Atlanta, Ga., speaks mainly (*Atlanta Med. and Surg. Jour.*, Dec., 1887), of hypertrophied turbinated bones and deviations of the septum requiring surgical treatment. The parts usually hypertrophied are the ends of the inferior and middle turbinated bones, and the lower portion of the septum. These ends are red and swollen; the mucous membrane is thickened, bulging towards the septum, and is often in contact with it, thus irritating the mucous membrane of the pharynx, larynx, nasal duct, etc., and causing stenosis of the nasal duct, Eustachian tube, and by extension, producing deafness, tinnitus aurium, etc. The congestive pressure in the nose causes distressing neuralgias of the head, face, ears, eyes, etc. The thickening over the turbinated bones and septum is sometimes in patches. The free borders of the bones, especially the lower, are also often enlarged, projecting towards the septum and floor of the nose. Difficulty of nasal inspiration is an early symptom of hypertrophy of nasal tissue. Sometimes the hypertrophied posterior ends of turbinated bones, instead of being red, appear as a swollen, grayish mass blocking the posterior nares. In simple, *chronic rhinitis*, firm pressure with the probe on the anterior end of the turbinated bone pushes the membrane back against the bone, and there is no recoil when the probe is removed, because there is thickening of the mucous membrane; but in *true hypertrophy*, firm pressure makes but little impression on the tissues because of induration, etc. In *chronic rhinitis*, cocaine causes the swelling to almost disappear, but applied to

true hypertrophies, it makes but little impression. Treatment of hypertrophies is either by galvano-cautery or escharotics. Of the latter, chromic acid is preferred. Do not make extensive applications of either cautery or escharotic to the septum, as wounds of that part heal slowly. If chromic acid be used, heat and dip a thin, flat probe in the acid crystals, or enough will adhere to make a thorough application if one side of the probe covered with hot sealing wax is pressed against the acid. Apply only to diseased surfaces. It effectually destroys hypertrophies of turbinated bones. Do not touch at the same time two opposing surfaces in close proximity, as adhesions will occur. Glacial acetic acid, much used in small hypertrophies, is less effective. Applications of acids or galvano-cautery should not be repeated oftener than once in two weeks. The stronger acids and cautery should only be used on outer walls of nasal cavity. Growths on, or decided deviations of septum should be removed with knife, scissors, Bosworth's saw, surgical engine, etc. Electric wire or cold snare may be required for posterior hypertrophies.

Keratosis Obturans.

Dr. S. Latimer Phillips, of Savannah, Ga., says (*Atlanta Med. and Surg Jour.*, Dec., 1887), Wreden, of St Petersburg, described this rare condition thirteen years ago, to distinguish it from the well-known cerumenosus obturans, or simple impaction of wax in the ear, for which it is easily mistaken. Of 3,261 ear cases in Massachusetts Eye and Ear Infirmary, 1886, there were only four cases; while in the Manhattan Eye and Ear Hospital, and in New York Ophthalmic and Aural Institute for the same period, no case is reported. It consists of a peculiar laminated epithelial plug of the external auditory canal, not dissolved by water or alcohol, and difficult to remove; syringing cannot remove it. Neuralgic pain in and about the ear is an early symptom, and deafness of varying degrees is gradual in its onset. No cause has yet been suggested for the disease. When the plug is removed by tedious manipulation with the ear forceps (the parts being cocained), it has the appearance of wet white tissue paper, and the same boggy feel of wet paper when taken between the fingers and crushed. Prognosis is usually good. Except when there is pre-existing middle ear catarrh, the hearing is much improved after the removal of the mass. The trouble is liable to return, especially if the patients adopt the habit of picking at their

ears. He reports a case under his own care, in which a large plug of white, leathery-looking substance was removed from one ear after many attempts. Warm solutions of bicarbonate of soda (℈j. to ℥j.), freely used in the other ear so softened the mass as to allow of its entire removal after several attempts.

Myxomata of Orbit—Probably Periosteal.

Dr. W. L. Bullard, of Columbus. Ga., reports an interesting case (*Atlanta Med. and Surg. Jour*, Dec., 1887,) of a colored woman, aged 69, with an exophthalmos caused by pressure from behind. Disease began 12 years ago. Two years ago the ball protruded from its socket, and rested on her cheek. Cornea had ulcerated, leaving an atrophied ball or stump. Ether was given. Drs. Blanchard and Walker assisted. Entire extirpation was impracticable, but proceeded as in orbital abscess, turning out 3 or 4 ounces of dark, thick, gelatinous matter similar to that in ovarian cysts. Finger exploration, instead of finding the recti muscles, optic nerve, cellular tissue, etc., found a cavity running back as far as the finger could reach, with a general caving in of the walls of the orbit. Washed out cavity with carbolic acid solution, held the incision in apposition with sutures, inserted drainage tube, replaced the stump and curvated lids to their normal relations and bandaged. Corrosive sublimate (1 to 2,000) was used as antiseptic. Greater portion of a projection (one-half inch or more) of new bone just below superciliary ridge was removed. Incision (2 inches) healed by first intention. Patient recovered without hyperexia, except on second day temperature ran up to 102°, but soon went down to normal and so continued. Though she will never recover, she is free from pain, is better and

stronger, and "her stomach has come back to her." The proptosis has receded, and the disfigurement not comparable to that before the operation. Absorption of the recti muscles, etc., rendered it impracticable to replace the stump, over which to fit an artificial eye.

Enucleation—Indications Pro and Con.

Dr. W. Cheatham, of Louisville, Ky., believes (*Atlanta Med. and Surg. Jour.*, Dec., 1887), no proposed operation will displace enucleation. It has caused death when panophthalmitis is present—meningitis being the chief complication. Under such conditions, death has also been caused by hæmorrhage. An objection to the operation is the disfigurement by the empty socket and sunken lids. He believes we always have warning of sympathetic irritation in the sound eye, by such symptoms and signs as occasional blurring of vision, hyperæsthetic retina, indicated by photophobia, etc. Mauthner says, an injured eye must not be enucleated if the sympathetic inflammation is of the serous form, because enucleation often transforms the serous into plastic inflammation, thereby increasing the danger of the fellow-eye. No set rules can be laid down as to what to do in all cases, but Dr. Cheatham thinks Mauthner's rules are the most perfect yet formulated.

Asylum or Home Treatment of Recent Insanity.

Dr. Geo. Fielding Blandford, of London, Eng., in an abstract of an address before the recent International Medical Congress, advises (*Atlanta Med. and Surg. Journal*, December, 1887) a well-ordered asylum as the best place for treating acute mania, but many causes often prevent this. *Mania transitoria* is characterized by suddenness of attack, with or without premonitory symptoms. There is generally some exciting cause lighting up a disordered brain marked by instability and explosiveness. It frequently passes away as rapidly, but it may become chronic. Removal and seclusion of the patient often gives the troubled mind time to recover. Religious excitement is a frequent cause, and so is a "spiritualism" excitement. Protracted exercise, excessive fatigue, exposure to the sun for long periods of time, are also causes. Acute mania also sometimes follows acute diseases, such as measles, variola, pneumonia, etc., when the fever abates. It has been called the *delirium of collapse.* It generally comes on on awakening from sleep. Prognosis is favorable. Removal from home is not to be thought of, unless

the mania becomes permanent. The *mania of gout and rheumatism* is peculiar, in that it, in a short time, assumes great gravity of appearance and as suddenly disappears on an attack of the disease declaring itself. It is sometimes wor h while to apply hot fomentations to the feet and give liberal diet to bring about a return of the gout. Repeated *epileptic* seizures often develop mania. *Delirium tremens* usually terminates in a week in death or recovery. Insanity is, moreover, sometimes produced by drinking, which passes off quickly if the drinking is not of long standing. Some minds are essentially unstable. The history of similar and repeated attacks is an important element in prognosis. Recovery after several attacks is not as speedy as the first time.

The *pulse* may help to determine the prognosis as to the duration of an attack of acute mania. If the pulse does not fall, but remains rapid when the patient is at rest, when the maniacal paroxysm is over, the chances are that the maniacal attack will last for weeks or more. In violent attacks the *tongue* will often remain moist and clean; but if it becomes dry, furred, and brown, with that peculiar coat characteristic, not of gastric but of nervous trouble, then we can hardly hope the attack will pass off in two or three days. "Hysterical mania" is characterized by noise and violent behavior rather than by fixed ideas or delusions. If they begin suddenly, and if between the attacks the patient is rational, then we may hope; but if the violence increases and gradual-forming delusions mark the intervals, the outlook is bad. Sleeplessness is a threatening symptom. Sleep, even produced by a narcotic, revives the patient.

If mania becomes chronic, but not homicidal, if the friends will provide well for him at home, it is not necessary to remove him to an asylum. Facilities for out-door exercise and an active and intelligent surveillance must be provided. But other patients ought to be sent to asylums at once to get the benefit of example. A patient may refuse to eat when alone, but may follow the example of others when put with those who eat, especially if the attendants assume that they do not care whether he eats or not. Incurable cases—general paralytics, etc.—should be sent to asylums.

In *treatment of depressed and melancholic patients* asylum residence is not an absolute safeguard against suicide. Some will attempt suicide only when there is a tempting opportunity; others regardless of whether they are seen or not.

It is idle to attempt treatment in home associations. Treatment in asylums reacts against that intense egotism which marks melancholia—he is only one of a crowd. In private houses the feeling of self-importance is fostered and maintained.

Abscess of Brain, with Cases.

Dr. W. F. Westmoreland, Jr., of Atlanta, Ga., reports several interesting cases (*Atlanta Med. and Surg. Journal*, December, 1887), with remarks. *Case* 1 was traumatic, four or five years standing, with an opening through parietal bone, in upper posterior part. Probe follows a fistulous tract, four inches, towards centre of brain, and pus flows freely. Wound in scalp kept open with elm tent so as to allow drainage, and gave potassium iodide ʒss, three times daily, because of syphilitic history. In three months—wonderfully improved, and probe passes only 1½ inch. In a month more dismissed well, but directed to continue the antisyphilitic. Three years later wound had reopened, and probe passed 3½ inches downwards, and forwards into the brain; discharge is now only ʒj a day. No syphilitic symptoms. Stop the iodide. Trephined. Five ounces of pus escaped from beneath the brain surface after removal of the trephined circle of bone. Hæmorrhage severe. Packed cavity tightly with bichloride gauze, which stopped hæmorrhage. In about two weeks, with antiseptic dressings every two or three or four days, the wound filled from the bottom—the brain expanding and regaining its normal position from which it had been pushed. Patient's mind clear; and could think, read, and write from day of operation.

An important symptom of cerebral abscess, present with great regularity, is *normal or subnormal temperature*, whereas in other brain troubles apt to be confused with abscess, temperature is generally elevated. In above case temperature varied from 97.5° to 98.5°—never higher. *Latent stage* is generally from one to two months; but this varies from five days to twenty or more years.

Case 2, aged 60, hatchet wound of outer table of frontal and parietal bones, 1½ inch to left of sagital suture; no depression of bone; walked two miles to his surgeon, and had no unpleasant symptoms for 20 days, when he had severe convulsions, which were repeated several days, until the wound was opened and spiculæ of bone removed. While doing apparently well for about 10 days, he was suddenly paralyzed, and died next day. The temperature was never

above normal. But the autopsy revealed a capsulated abscess the size of a large walnut in left frontal lobe beginning a quarter of an inch beneath the surface of the brain.

Case 3 (Dr. R. B. Ridley's). Pistol-shot entered frontal bone above and in front of ear. No cerebral symptoms for some days, and was able to walk about his room, smoke, converse with friends, etc. There was never any increase of temperature. But he died some weeks afterwards. Examination after death found an encapsulated abscess about the size of a walnut in the substance of the brain, with the pistol-ball in it.

There has never been a recovery recorded from traumatic cerebral abscess without operative interference. Antiseptic trephining is not dangerous. Briggs has trephined 30 times without a death. Hence, it is as much our duty to operate for a cerebral abscess as for one in any other region of the body. When the dura is reached, and the abscess is not in sight, cut through it. If still not in sight, Dupuytren and Nelaton plunged their bistouries into the brain with success, and Detmold with partial success. But it is a bold surgeon who will try this. A more conservative and a better plan, followed by Hulke, Fenger, Lee, Nancrede, etc., is to explore the brain with an aspirating needle, mounted upon a small syringe. When the abscess is located, cut into it with a knife. If hæmorrhage is feared, introduce a pair of stout forceps alongside the needle, forcibly open them and withdraw, leaving a large enough opening for free drainage. Wash out cavity thoroughly with 1:2000 bichloride mercury solution. If necessary for efficient drainage, make a counter opening, and introduce a couple of fenestrated drainage tubes; or, in exceptional cases, pack the cavity with bichloride gauze. When possible, close the trephine opening with the disc of bone removed, which leaves an opening sufficiently large usually for the drainage tube. If you expect to replace the disc, keep it wrapped in warm, carbolized cloths. Under such strict antisepsis, the bone retains its vitality, and is an important factor in the process of repair.

Lower Segment of Coccyx Passed per Anum Ten Days After Labor.

Dr. W. J. Jolly, of Waldo, Fla., writes to the *Atlanta Medical and Surgical Journal*, Dec., 1887, that he recently delivered a primipara, aged 21. When the head pressed against the coccyx, it did not yield. Delivered with forceps with-

out difficulty or perineal laceration. But immediately after labor, she suffered intense coccygeal pain. Gave opiates, and supposing fracture, corrected position of displaced bone. Except tenderness, she did not suffer, until ninth day. On tenth day, at stool, she passed a piece of bone, which she sent to the Doctor, who recognized it as the lower segment of the coccyx. She had no after trouble. He has seen no similar case recorded.

Treatment of Hepatic Abscess by Aspiration, with Cases.

Dr. Edmund Souchon, of New Orleans, contributes a valuable article (*N. O. Med. and Surg. Jour.*, Nov., 1887) under the above heading. Success in treatment depends mainly upon *early* interference, to prevent loss of hepatic structure. Be on the alert for the following symptoms: *Maximum pain* in the epigastrium, or the right six lower intercostal spaces, from behind forwards, determined by both palpation and percussion; slight *prominence* in the epigastrium; a *spreading* or *filling* of the intercostal spaces; slight puffiness of the parts; *slight œdema* and *fluctuation*, before discovering which, the diagnosis ought to have been made. Fever and other constitutional symptoms must be carefully noted. As soon as one or two spots of maximum pain are found, we must *explore at once with the aspirator*. The smaller the abscess, the better chance for cure. It is important to notice the course of the abscess, its depth, and its situation. The progress is more favorable if the morbid course be slow. Clinically, five classes of abscesses are recognized—suracute, acute, subacute, chronic, and mixed. In the *first* we have great pain and high fever, 104° to 106°; duration from 10 to 20 days; recovery exceptional. *Acute abscesses*—much pain; temperature 103° to 104°; last from 30 to 40 days, and demand the greatest care of all. *Subacute*—little pain and fever; temperature 99° to 101°; develops in from 60 to 70 days. As a rule, aspiration succeeds well. *Chronic*—scarcely any pain, and seldom fever after abscesses are formed. Often cured by repeated aspirations. *Mixed abscesses* change form in their development. Aspiration gives better results than is supposed. Previous exploration is not favored, and the kind of instrument is an indifferent matter, provided it is found to work well beforehand. The size of the needle is of great importance. A No. 2 of Dieulafoy's set is suitable. If the pus be thick, the pump must be kept working briskly; the points for exploration must be marked; the needle should enter perpendicularly, and be

driven slowly, the depth being measured. Other excellent rules are given, and the paper concludes with a number of illustrative cases.

Asthenopia: Local and General Headache, Caused by General Weekness of the Eyes, and How Such Headache is to be Cured.

Dr. William C. Ayres, of New Orleans (*N. O. Med. and Surg. Jour*, Nov., 1887), writes a scientific and interesting article on this subject. The question of natural vision is first considered, and then the various refractive errors explained; after which the writer states the causes of asthenopia, which are: Muscular strain to correct hyperopia and hyperopic astigmatism; insufficiency of the internal recti muscles, especially when combined with anomalies of refraction; and paresis of the ciliary muscle. The manner in which muscular strain is brought about is then clearly explained, and the relief of pain and other symptoms by carefully selected glasses is demonstrated.

Case of Pelvic Abscess.

A housemaid, aged 25, previously in good health, had the usual symptoms of the trouble. Aspiration was used through the posterior wall of the vagina, and a pint of thick, offensive pus removed. The cavity was washed out with carbolized water, and the patient improved; but the pus reformed, and finally a free incision was made and a drainage tube inserted, irrigation being kept up. Tincture of chloride of iron was given. Recovery followed. The belief is expressed that continued aspiration would not have cured patient.—Reported by J. J. Wray, of Charity Hospital, New Orleans (*N. O. Med. and Surg. Jour.*, Nov., 1887); Service of Dr. Geo. B. Lawrason.

Case of Cephalic Version Three Hours After Membranes Ruptured.

The patient, aged 60, in labor for six hours, was found with great pain in the back, strong labor pains, and a swollen vulva; left hand and forearm of child protruded. Position, dorso-anterior; head in right iliac region; no sound of fœtal heart; shoulder impacted in the superior strait. Membranes had ruptured three hours before, and one hour later the hand and arm came down. An anæsthetic was given; the arm shoved up, flexed, and swept backwards over the child's chest; the shoulder shoved upwards to the

left; externally the head was pressed downwards towards the median line, and engaged in the superior strait. After becoming conscious, the patient's pains began again; but there being no progress at the end of the hour, forceps were used, and a still-born child delivered. Recovery rapid.—Reported by J. J. Wray, R. S. Charity Hospital, New Orleans (*N. O. Med. and Surg. Jour.*, Nov., 1887).

Original Observations and Methods in the Practice of Medicine.

Dr. L. M. Stroud, of Forney, Texas, calls attention (*Daniel's Tex. Med. Jour.*, Nov., 1887) to some drugs whose remedial effects he has closely observed.

Veratrum.—In pneumonia, its power is best observed. As soon as he is called, a hypodermic injection of Norwood's tincture, about six or seven drops, combined with a little cocaine, is administered; half this amount is repeated every half hour until the patient vomits, and copious draughts of hot water are given to protect the stomach. After this, two or three drops every three hours, by the mouth, are given. This is sufficient to control the circulation 24 hours, but the drug is usually pushed to emesis at each respiral exacerbation. It is claimed that by holding the pulse between 65 and 70, further pulmonary invasion is prevented; that death from heart failure will not occur with a pulse of 70; that purulent infiltration of the lung will not take place; and that the heart, even of a weak patient, will not be paralyzed.

Sulphuric Ether in Congestions—such as congestive chills, general capillary congestion, cholera morbus, chole ra infantum, incipient dysentery, etc. *Chloroform* is highly spoken of in cerebro-spinal-meningitis, and an illustrative case is given. For *vesical catarrh*, distension and washing out the bladder with a fountain syringe and a soft rubber catheter, are curative. Stress is laid upon full distention, so as to wash out the mucus from the folds of the membrane. Afterwards, a two per cent. solution of sulphate of zinc is used. In a case of *placenta prævia*, where death was imminent, the hæmorrhage was stopped by raising the foot of the patient's bed three feet. Barnes' largest dilator was introduced, and dilatation was easy, the pains produced being efficient. The placenta was removed and version performed. Good recovery. Lastly, the *evil effects of quinine in typhoid fever* are emphasized. It often excites hæmorrhage, irritates the stomach, and is injurious to ulcers. But the drug must be given where malarial complications exist, until these are antagonized.

Congestion of the Brain Followed by Amnesic Aphasia.

Dr. A. H. McCord, of Rusk, Texas, reports the case (*Daniel's Tex. Med. Jour.*, Nov., 1888) of a female child, aged 6 years, who was seized with convulsions, lasting about 15 minutes, after which there were tonic spasms of the fingers of both hands, the forearms being flexed upon the arms. Trismus also existed, with incessant chronic spasm of the muscles of the right side of the face for nearly two hours. Under treatment, consciousness returned in 24 hours, and a complete amnesic aphasia was noticeable, the entire vocabulary being "yes," "no," indiscriminately used. There was no paralysis of any character. Under tonics the patient soon regained her physical health, but not until the lapse of four or six months did she re-learn words enough to express herself. Was the aphasia caused by prolonged hyperæmia of the brain, or was it due to extravasation of blood in the cineritious substance of the plank of Reil? Was it anti-lateral, or bi-lateral? Or was it caused by malaria? as she lived in a malarious region.

Azoospermia: Its Relation to Male Sterility.

Dr. Albert Abrams, of San Francisco (*Progress*, Nov., 1887), distinguishes between *azoospermia* and *aspermatism*, which latter term signifies a prevention of the ejaculation of semen during coitus, and is divided into absolute aspermatism, relative, temporary, onanismal and paralytic. Azoospermia is more frequent than is supposed. Kehrer examined the generative organs of both sexes in 40 cases selected at random, finding azoospermia in 14 and impotency in 2. The most frequent cause of the condition is gonorrhœal epididymitis, while affections of other parts of the sexual system may lead to the trouble. Measures for relief depend upon the exact cause, but they are often unsatisfactory. Artificial fecundation is referred to.

Ear Pain, and its Treatment.

Dr. E. Meirhof, of New York, speaks particularly (*Daniel's Tex. Med. Jour.*, Nov., 1887) of the means of relieving pain. For reflex ear-pain, atropine stands first. The external auditory canal is cleansed, and a piece of absorbent cotton, saturated with a one per cent. solution, is packed in it. Cocaine is less efficient. Another good remedy is painting the mastoid process and adjacent parts with camphor-chloral. Nerve sedatives may be necessary at times. Furuncles are best relieved by a free incision from the base upwards, and

atropine used for any resulting distress. In diffuse cellulitis a stream of hot water, applied to the ear about the orifice for ten minutes, every hour or two, is useful. Incision may be called for. A piece of cotton may be placed in the canal to prevent the water from entering it, and morphine has to be given occasionally. In acute catarrhal and acute suppurative inflammation of the middle ear, atropine often relieves the pain. Incision of the drumhead does not always stop pain, but no harm is done if pus be not found. Inflation of the middle ear should not be neglected. In chronic suppurative inflammation of the middle ear, with involvement of the mastoid cells, therapeutic measures sometimes do good, but surgical interference is often required.

Typhoid Fever in Louisville, Considered from an Economic Standpoint.

Dr. J. M. Clemens, of Louisville, Ky. (*Progress*, Nov., 1887), traces typhoid fever to well water, and, after carefully discussing the question, shows that the city would eventually gain financially by filling up the wells, substituting public hydrants where practicable, and in other cases putting down thedrive or tube well.

Essential Nature of Inflammation.

Dr. John B. Elliott, of New Orleans (*N. O. Med. and Surg. Jour.*, Dec., 1887), after considering the part played by the nervous system, says "that inflammation is caused by a loss of relation between blood and tissue,"—which is the substance of Sir James Paget's belief. Molecular changes are treated of, and the fact shown that there is no real increase of heat and that tissue building has not ceased. The opinion is expressed that inflammation is conservative.

Case of Congenital Paralysis and of Paresis of Several Nerves of the Eye

Dr. Wm. C. Ayres, of New Orleans (*N. O. Med. and Surg. Jour.*, Dec., 1887), reports this case, a similar one to which he has not found in ophthalmological literature. The patient, æt. 49, had vision 20-xx+, but was not hyperopic. Reading, or any close work, required a strong convex glass. There was insufficiency of the internal recti and of the inferior oblique muscles, and complete paralysis of the sensory nerves of the cornea and conjunctiva. The sphincter of the iris reacted to light; acuteness of vision diminished as objects neared the eye; asthenopia never present, so far as

known. The case was a congenital paralysis of the ciliary branch of the third nerve—a defect in the centre of those which control the sphincter of the iris under accommodation, while those which control it under light stimulus are intact.

Case of Abscess of the Liver.

Dr. David Jamison, of New Orleans (*N. O. Med. and Surg. Jour.*, Dec., 1887), refers to a case in which aspiration yielded three pints of pus. Improvement followed, but in ten days a quart more of less offensive pus had to be removed. A week later the abscess broke into the lung. Iron, quinine, sodium sulphocarbolate and stimulants were given. Aspiration again was fruitless. The patient grew worse, and gaseous enemata were used, Prof. Souchon stating that Dr. Parham was using this treatment in Charity Hospital. The patient began to mend at once, and in a month was discharged—cured, so far as could be known.

Large Nævus on Soft Palate.

Dr. A. McShane, of New Orleans, reports the case (*N. O. Med. and Surg. Jour.*, Dec., 1887). The growth was on the right side of the soft palate; purple, soft and dilated blood-vessels on the surface. The pillars of the fauces and the uvula were involved. No inconvenience in swallowing or speaking, but the tumor swells a little during a cold.

Pseudo-Membranous Croup—Treatment.

Dr. T. B. Greenley, of West Point, Ky., reports (*Prog.*, Dec., 1887) several cases showing that an alterative plan of treatment gave the best results. To infants aged two years he gave one-half a grain of calomel with one grain of muriate of ammonium every two hours, applying cloths wrung out of hot water to the neck. Intubation and tracheotomy are advised when indicated.

Pneumatic Resistance Valves.

Dr. Sol. Solis-Cohen, of Philadelphia, describes (*Prog.*, Dec., 1887) an instrument which possesses the chief advantages over those hitherto in use of allowing the pressure to be accurately regulated according to the requirements of the case. The diseases to which this treatment is applicable and the manner of using the instrument are carefully considered.

Treatment of Bunions.

Dr. Robert T. Morris, of New York, first discusses (*Prog.*, Dec., 1887) the nature and manner of production of bunions, and gives a treatment based upon his knowledge and experience. In a patient not far past middle age, whose hallux bursa has not suppurated, inflammation is subdued by elevation of the foot and the alternate use of hot and cold water. If there be a well marked corn over the bunion, apply twice daily for a week a solution of one drachm of salicylic acid in flexible collodion, and soak the foot in hot water for fifteen minutes. The corn can then be removed. A broad-toed laced shoe is worn during the day, or a slipper in severe cases, but neither should be worn continuously at first if the deformity be great. Courtplaster over the site of the bunion prevents quick recurrence of the corn. If the external lateral ligament of the great-toe joint is shortened enough to cause pain after the compartment shoe has been worn for three months, the ligament must be cut by open incision, cocaine being used according to Corning's method. The wound is closed completely, a firm compress applied, and the toe held in position by a splint of gauze-lined thin wood. The foot may be used three weeks after the operation. When the walls of the bursa are much thickened, the sac is to be dissected out. Where exostosis, or bared bone, or firm anchylosis exists, the head of the metatarsal bone should be excised, and it is imperative that the procedures be conducted in such a way as to avoid suppuration.

Case of Triplets.

Henry J. Scherck, R. S. Charity Hospital, New Orleans, reports the case (*N. O. Med. and Surg. Jour.*, Dec., 1887). The first child, a female, weighed 4½ lbs.; the second, a male, 3½ lbs.; and the third, a male, 2½ lbs. Fourteen days have elapsed, and the mother is about and the children doing well.

Suppurative Otitis Media.

Dr. Seth S. Bishop, of Chicago, protests (*Prog.*, Dec., 1887) against the packing of the canal with boracic acid, and has found the most successful treatment to be: Cleansing with bichloride solution (1 to 10,000); inflation by the Politzer method, or catheterization; iodine vapor, if stimulation be required; draining the part with absorbent cotton, and dusting with finely pulverized acid containing ½ of 1 per cent. of bichloride, or if this cause any unpleasant sensation, iodo-

form or boracic acid may be substituted. Peroxide of hydrogen is highly spoken of.

Artificial Ripening of Cataract.

Dr. Bœrne Bettman, of Chicago (*Prog.*, Dec., 1887), instead of rubbing the cornea, prefers to bring pressure directly upon the capsule of the lens by means of a spatula. Good reasons are given for this procedure, which must be done with great care. The spatula is passed into the anterior chamber, and if necessary behind the iris, while the lens is gently stroked and pressed in any direction. The conclusions of the writer are: The operation is feasible, easily executed, devoid of danger, is always followed by rapid and marked results, renders the subsequent removal of the lens easier, and lessens the danger from complications after extraction.

Obstetric Memoranda.

Dr. John B. Enright, of Louisville, Ky., cites a case of twins (*Prog.*, Dec., 1887), from which the following conclusions are drawn: Drowsiness produced in the second child was caused by too early use of morphia; ergot should never be given before the birth of a child and expulsion of secondines, unless there be a history of hæmorrhage, but a good practice after the uterus is emptied; intra-uterine injections in this case were contra-intradicted, as *all* the secundines had been removed; always give quinine, as it prevents sepsis; vaginal injections are useful only for cleanliness and comfort.

Epidemics.

Dr. Geo. M. Sternberg (U. S. A.) presented a paper—to be continued—(*Prog.*, Dec., 1887) to the American Public Health Association at Memphis, Nov. 8th, 1887, in which he considers the question carefully in its various bearings—discusses the means of prevention, and particularly treats the subject of quarantine.

Placenta Prævia.

Dr. Wm. D. Haggard, of Nashville (*South. Prac.*, Dec., 1887), in this continued paper discusses the history and nature of the trouble, quoting from various authorities, and illustrating his views by a case. In distinguishing between accidental and unavoidable hæmorrhage, the writer states that this can be done, as a rule, without digital examination

by observing that in accidental hæmorrhage the bleeding stops during pain, but in the other case begins during the uterine contraction.

Erysipelas.

Dr. Deering J. Roberts, of Nashville, Tenn. (*South. Prac.*, Dec., 1887), quotes from authorities on the nature of the disease, and states his belief that it is "produced by a specific germ, requiring for its development a traumatism, or that condition of the animal tissue in which more or less of the blood is in an allied or similar condition to that found in the immediate vicinity of a recent wound." The subject of treatment is soon reached. Iron is given in full doses. Cathartics are used with great caution, as Dr. W. K. Bowling mentions that in many cases which came under his observation in the military hospitals at Nashville, diarrhœa occurring as a complication pointed almost certainly to death. Arterial sedatives are avoided. Nitre is used at times to stimulate the kidneys. Quinine in good doses, and alcohol, are important. Locally, the writer has tried many plans, and favors especially the following mixture, recommended by Dr. James Franklin, of Sumner county, in 1874:

℞.—Quinine sulph..... ʒj.
Tinct. ferri. chloridi.....f.℥ss.
Tinct. cinchonæ..... ..f.℥iss.

M. S.—Apply over and just beyond the inflamed area two or three times in twenty-four hours.

In involvement of the deep connective tissue, with pus formation, incisions are demanded. When blebs, bullæ, etc., appear on the surface and discharge, equal parts of lime-water and linseed oil, with one-sixth to one-fourth part of Listerine, or bromo-chloralum, is applied over the part four to six times in twenty-four hours.

Case of Extra-Uterine Pregnancy and Gastrotomy.

Dr. Wm. M. Cunningham, of Bastrop, Texas (*Daniel's Tex. Med. Jour.*, Dec., 1887), reported the case of a lady, aged nearly 69, and the mother of nine children, who had had for twenty years a tumor in her right inguinal region. Abdominal fluctuation was present. The fluid was drawn off by the trochar. The tumor could then be felt more plainly. Supportive treatment was used. In consultation, it was decided that removal of the tumor offered the only chance for life. An incision of 4½ inches, beginning 2 inches below the umbilicus, was made. The peritoneum was opened, and two

gallons of fluid removed. The tumor had no parietal, uterine, or ovarian attachment, and was found to be an ossified fœtus. The usual precautions and antiseptic measures were used. Shock was considerable, and death resulted six days subsequently. The writer states that in all cases of non-malignant ovarian abdominal tumors, which are movable, whose attachments are not extensive, and which have no attachment to the liver, if they have begun to develop in size, and to interfere with the proper functions of the abdominal organs, and if the vital constitution and powers of the patient are reasonably good, the operation of ovariotomy or gastrotomy for the removal of these tumors is perfectly justifiable at any age of life.

Gastrotomy for Incised Wound of Stomach—Fish Bones Removed from the Abdominal Cavity.

Dr. J. A. Black, of Round Rock, Texas (*Daniel's Tex. Med. Jour.*, Dec., 1887), gives the case of a white youth, æt. 17, whose abdomen was cut with the long blade of a large pocket-knife. The wound was immediately below the lower margin of the ribs, about five inches from the median line; two inches long, extending toward the median line, parallel with the margin of the ribs. Undigested food and blood escaped. Dr. T. J. Bennett, of Austin, with the writer's assistance, enlarged the cut. Several large fish bones, along with food and blood, were lying on the great omentum and intestines, and were removed. It being found that a wound 1¼ inches in length had been made near the centre of the great curvature of the stomach, that organ was drawn out, and two interrupted and two continuous sutures were inserted. Fine iron-dyed silk closed the wound. While the stomach was in the operator's hand, vomiting occurred, and the muscular contractions were plainly felt. The cavity was mopped out, but no irrigation used. The external wound was closed with eight interrupted sutures of iron-dyed silk, the peritoneum being included in each one, and space enough being left for the possible escape of pus. The usual after-treatment was faithfully carried out; and although the patient came near dying at one time from colliquative diarrhœa, recovery followed.

Hæmaturia Miasmatica, and its Treatment.

Dr. A. M. Perkins, Sabine Pass, Texas (*Daniel's Tex. Med. Jour.*, Dec., 1887), states that this disease is perhaps the most fatal in the Southern latitudes; that twenty years ago it

was very rare, while now it prevails to an alarming extent; and that, in his opinion, the injudicious use of quinine is an important factor in the production of the trouble. He dissents from the teaching of Bartholow, and claims that quinine in largs doses at the beginning of the disease can do no good. The manner in which the drug injures is explained, and the following treatment recommended: Morphine hypodermically; calomel and antimony until the secretions are started; rubefactients; and diuretics, such as bitartrate and nitrate of potassum, to avoid one of the great dangers, which is hæmorrhage into the stroma of the kidneys and uriniferous tubes, causing suppression of urine. Astringents are not used. Spirits of turpentine in diuretic doses, with nitre, is sometimes very useful. One-fortieth of a grain of strychnine, with one grain of quinine, is given every two hours to brace the nervous system. When the calomel begins to act, the quinine is increased. Stress is laid upon the efficacy of strychnine. When improvement begins, tincture of chloride of iron and potassium chlorate is a good combination for the kidneys, and strychnine and quinine as a tonic.

Eye Diseases, and Other Reflexes, Due to Errors of Refraction

Dr. T. J. Tyler, of Austin, Texas (*Daniel's Tex. Med. Jour.*, Dec., 1887), calls attention to the importance of an early recognition of refractive errors. The different troubles produced by straining the eyes under such circumstances are pointed out, and great care enjoined upon the oculist in adapting the proper glass. Special stress is laid upon the principles governing the principles of hyperopia.

Early Diagnosis of Spinal Caries, with Remarks on Treatment.

Dr. Hunter P. Cooper, of Atlanta (*Atlanta Med. and Surg. Jour.*, Nov., 1887), after a general treatment of the question, lays particular stress upon the diagnosis of the disease in its early stages. The symptoms are pain, gait, rigidity of spine, and general behavior of patient. Sometimes an abscess will be found. The family history must be carefully inquired into. A traumatism will almost always be discovered. In adults, the symptoms are often obscure, resembling rheumatism, neuralgia, or lumbago. Persistent intercostal pain, especially in the back and abdomen, should be noticed. One or more spinous processes are often very tender. In adults, also, there is more frequently a history of *violent*

traumatism. In children, there is usully a history of irregular pain, according to the location of the caries. The child does not sleep well, and in the day is not himself. The prone position is often assumed. The child is apt to use chairs, etc., for support; and if the trouble be high up, the patient rests its head in the mother's lap or upon the bed. He walks with a careful or apprehensive expression, the body being held rigid, and the feet placed on the floor cautiously. When the seat of disease is in the cervical or upper dorsal region, torticollis, or opisthotonos, may be present. In some cases, one shoulder is thrown slightly forward and a little higher than the other. Children who are subjects of Pott's disease are very often well nourished in having a sufficient amount of fat upon the limbs and body, but the flesh is soft and flabby. This is frequently referred to by the parents. The facial expression is often characteristic. If, in addition, an abscess presents in the neck, pelvis, groin, or lumbar region, the diagnosis is easier. Rickets, natural curvature of the spine, aortic aneurism, and hysteria, must be differentiated. As to treatment, the writer thinks that the plaster of Paris jacket (with or without the jury-mast) is the easiest, cheapest, and best measure in the majority of cases. The patients must not be suspended too high, as the diseased spot may be injured, and the risk incurred of breaking up any solidification. The operation should be over as quickly as possible. Excoriations on the back, and marked projections backwards of the spinous processes should be protected by strips of piano-felt. The crests of the ilia should be covered with cotton-wool, and the dinner-pad never omitted. A seamless and sleeveless knit shirt is the best. [Such as is made for Dr Sayre and practitioners all over the United States by A. M. & F. D. Lawson, 795 Broadway, New York, N. Y.]

Incipient Insanity—Treatment.

Dr. H. E. Stroud, Grand Junction, Col., describes the case (*South. Med. Rec.*, Dec., 1887) of a married lady, 52 years old, whose hallucinations, sleeplessness, excitements, disposition to wander away from home, suicide, etc., seemed to have begun as result of opium, smoking, overwork, etc., that was greatly relieved by Faradic currents up and down her back, and one pill, three times daily, of the valerianates of iron, quinine and zinc (De Foe's) before each meal, followed by ten grains Lactopeptine after each meal.

Nervous Phenomena on Exposure of Anterior Column of Spinal Cord.

Dr. A. G. Hobbs, Professor of Eye, Ear and Throat Diseases, Southern Medical College, Atlanta, Ga., records a case (*South. Med. Rec.*, Dec., 1887) of syphilitic ulceration—about a silver quarter-dollar in size—of the upper part of the posterior pharynx in a young man, weighing 104 pounds, but who formerly weighed 140. Through the ulcer, pieces of bone were removed each day for about two weeks, until the index finger could be introduced, as far the first joint, into the cavity made by the ulceration. After four or five weeks of antisyphilitic treatment, constant pain in the back of his head and neck developed. Then he became unable to sleep except for a few moments at a time, and only in sitting posture. About the end of fifth week of treatment, during one of the "sittings," Dr. Hobbs pressed a silver-nitrate probe to the bottom of the ulcer, when suddenly, as if the patient had been shot, his right side became paralyzed. His head fell to the right, and his right leg turned outward, and he would have fallen from his chair had he not been caught. He did not lose consciousness, but the hemiplegia lasted about half a minute, when he "felt a tingling in the right half of his body;" and in 30 seconds more, he slowly raised his right side into position. The next day, the same phenomena recurred, but on the opposite side. Extreme insomnia (about an hour's sleep in 24) set in, and lasted ten days. Pupil of effected side dilated, but the perspiratory glands were not changed while the paralysis lasted. At the end of this time, healing of the ulcer began at the bottom, and soon he had less pain in the head and back of neck. A week later, pressure with the probe was repeated, with a recurrence of the hemiplegia, etc. In ten days or more, healing had well progressed. Now pressure with the probe caused jerking of the arm and leg, and jumping as in chorea. These choreic symptoms, always on the side of the pressure, lasted only as long as the probe pressure was continued, and were repeated on future days, but less markedly, and day by day requiring a firmer pressure to secure the effect. Finally, when cicatricial tissue had nearly closed the cavity, the probe pressure caused simply a "tingling or a pricking sensation," similar to that following the hemiplegia in the first instance. After the cicatrix had thoroughly hardened, under some months of treatment by iodide of potassium and "succus alterans" (Lilly & Co.), no manifestations followed the probe pressure. It is to be noted

(1) that the necrosis occurred in the spinous process [body] of the second cervical vertebra; hence the spinal cord was exposed either between 1st and 2d, or the 2d and 3d vertebræ; (2) probe pressure always produced effect on side of body on which it was made; (3) the pressure that produced the paralysis must have wounded the anterior column of the spinal cord by pressing a jagged piece of bone against the cord; and the pressure that produced convulsions must have only irritated the anterior column, since it is known that a wound of the anterior column produces immediate paralysis, and an irritation, immediate convulsions.

Report of two Cases of Fracture.

Dr. F. M. Ridley, of La Grange, Ga. says (*Atlanta Med. and Surg. Jour.* Nov. 1887), the first case was a youth æt. 13, remarkably strong and healthy. The right humerus was broken just above the condyles in a transverse direction, both ends of the fracture penetrating entirely the soft parts, and emerging, one through the biceps and the other through the triceps. Much pain and hæmorrhage, and the arm considerably swollen and twisted. Though antiseptic measures were used, the ends of the bones smoothed and coaptated; and the rectangular apparatus adjusted. Reaction was considerable, but three months subsequently the lad was in perfect health, with excellent motion of the elbow-joint, and the slightest possible deformity. In the *second* case, a delicate lad of ten years, there was an oblique fracture of the upper third of the femur, complicated with dislocation backwards of the head of this bone into the ischiatic notch. Dislocation was reduced, the bone set, a felt splint applied, and extension made by Buck's appliance, sand-bags being used on either side of the limb; a bandage was applied as soon as possible—after eight days—as this tends to prevent shortening. Four months subsequently the patient had perfect use of his limb, and *not the fractional portion of one inch shortening*, by actual measurement.

A Report of Surgical Cases

Is made by Dr. W. B. Rogers, of Memphis, Tenn. (*Miss. Valley Med. Monthly*, Dec. 1887).

I. *Lithotomy.* Child æt. 4 years, suffering with symptoms of stone for two years. Health unimpaired. Bullet probe at once detected a stone. Preparatory treatment was used, and chloroform given. The bladder was injected with four ounces of warm borated water, a small guide introduced,

and the median incision made. The stone being too large for abstraction, lithotrity was tried, but failed, and the neck of the bladder was incised bilaterally. The stone was abstracted and the bladder irrigated with a hot bichloride solution, the hæmorrhage being very slight and shock *nil.* Patient at home on tenth day. Stone was lithic acid, oval, rather smooth, measured $\frac{7}{8}$ x $1\frac{1}{8}$ x $1\frac{5}{8}$ inches, and weighed 260 grains.

II. *Lithotomy.* Child æt. $5\frac{1}{2}$ years. At two years he passed a small calculus; but symptoms of cystitis increased. Urine rankly ammoniated, suffering intense, and general condition very bad. Lateral operation, but the lithotrite had to be used. Venous hæmorrhage considerable, checked by hot water. On the eighth day the patient sat up, but pneumonia set in on the twelfth, from which he recovered. Several weeks passed before the wound healed. Excellent health was finally established. The stone fragments were lithic acid, weighing over 300 grains. "Lithotripsy in children of four to six years is practically out of consideration." In both cases the size of the stone was under-estimated.

III. *Removal of Superior Maxilla, Nasal, Malar, Palate Process of Palate, together with Turbinated Bones—Left Side—for Encephaloid, beginning in the Antrum of Highmore.* Patient a female æt. 46, general condition good. Two years previous the upper canine tooth was broken in an attempt to remove it. *Four months* before examination, occlusion of left nostril, with occasional epistaxis, was noticed. The symptoms increased, and after extraction of the first bicuspid, the antrum was trephined and the diagnosis made out. Shock of operation was slight, and the patient got well, but died from a return of the disease four and a half months later.

IV. *Vesico-Abdominal Fistula Dependent on Urethral Stricture—Bone in the Urethra.* Patient had been caught by the trunk of a falling tree and chrushed through the hips. Blood was passed in the urine, which had to be drawn off with the catheter for some weeks. Paraplegia existed for some time. "High fever set in shortly after the injury; much pain and some swelling in the hypogastric and right iliac regions, rigors and sweats for some days, after which pointing of pus was detected in the lower abdomen and two openings made, one at a point three inches below, and one inch to right of umbilicus; the other a little lower down on left side. Urine and pus escaped through these openings for several months, when the one on the left side closed. The one on the right side remained patulous, and all of his

urine was passed through this route at the time of first examination—three years and three months after the injury. During all this time he was an invalid, too weak and worn for any work. * * * Every few weeks a hardened mass in the inner aspect of right thigh, close up to pubic bone, would appear, accompanied by fever, rigors, and much exhaustion; then would follow a free discharge of pus, per abdominal fistula. Not more than ten drops of urine found passage through the urethra during the day." Examination revealed a foreign body in the membranous urethra. The operation revealed a piece of the pubic bone, ¼ inch thick, and ½ inch long, broken off by the tree. The body was skilfully withdrawn and recovery followed.

V. *Perineal Section without a Guide for Stricture of the Urethra—Operation for Strangulated Femoral Hernia—Recovery.* The patient, suffering with retention of urine, had a tortuous, organic stricture, beginning at the bulbous, and extending back through the membranous urethra, and complicated with a false passage. Anæsthetics could not be used, but in the operation, the median line was kept The stricture finder, and a No. 16 steel sound passed. Subsequently, after a spree, with violent vomiting, femoral hernia appeared. All efforts failing, an operation was performed without an anæsthetic or guide. No vessel was wounded in liberating the constriction at Gimbernat's ligament, and the omental hernia was successfully reduced.

Pruritus Hiemalis. (?)

Dr. E. A. Neely, of Memphis, Tenn. (*Miss. Valley Med. Monthly*, Dec. 1887) states that this affection has existed for the past three winters in his city. It makes its appearance usually in October, lasting until Spring. There is no primary structual lesion, but itching, smarting, burning sensations, sometimes formication, occurring singly or together. A peculiarity of the disease is, that paroxysms of almost intolerable itching may be brought on by exposure or heat. The skin is harsh, dry, and furfuraceous. The disease begins usually at one point and spreads, though not by continuity of surface, and bears a close relationship to atmospheric changes. In some cases it disappears in a few weeks, but the rule is for it to remain the whole winter. All ages suffer, and the majority of patients enjoyed excellent health. The extensor surface of the thighs and legs seems to be the favorite locality; next the corresponding surface of the arm and forearm. It rarely attacks the body, and never the

hands, feet, face or scalp. Males and females are equally affected. The treatment is unsatisfactory. The best prescription he has used is the following:

℞. Acid. carbolic (cryst)..... gr. viij.
Acid. salicyllat.....gr. v.
Ol. olivæ, pur. .....ʒj.

M. Sig.—Use locally morning and night. No benefit has been derived from restricted diet.

Medical Profession and the Public Health Movement.

The writer gives a short history of this subject, showing the advances in hygiene, and points out the importance of being thoroughly posted in this department of science.

Abortion of Pneumonia.

Dr. W. T. Smith, of Roan, La. (*Miss. Valley Med. Monthly*, Dec. 1888) thinks that pneumonia is not so often as supposed a complication of malaria, although he believes that malaria plays an important part in many cases of pneumonia. He thinks that oftentimes the disease can be aborted, and gives the following treatment; opium, quinine and aconite. Small doses of the two former will not suffice. Aconite must be handled cautiously, the dose being regulated according to the strength of the patient. He usually commences with three or four drops of Fleming's tincture, and continues with one drop every hour. The action of the heart has been found not to be slowed, but weakened, the effect of blood-letting being produced. Hot salt bags are thought to be useful locally.

Antiseptic Treatment of Intestinal Affections.

In an article on Intestinal Antiseptics by D. N. Kinsman, M. D., appearing in the *Journal of the American Medical Association*, July 3d, 1887, the author points out that the natural processes of fermentation and putrefaction going on in normal digestion are so changed in dyspepsia and other forms of intestinal disease as to produce poisonous alkaloids which are the cause of the symptoms developed in such disorders. The researches of Prof. Vaughn, of the University of Michigan, in which tyrotoxicon has been shown to be the cause of ice cream poisoning, which are still fresh in the minds of medical readers, have thrown still more light on the etiology of intestinal affections, and made apparent the importance of intestinal antisepsis as a method of treatment. To facilitate such treatment we learn that Parke, Davis & Co.

have recently added to their list an Intestinal Antiseptic Pill, the formula of which is as follows: Mercury protoidide, 1-8th gr.; Podophyllin, Aloin, Ext. nux vomica, Ext. henbane, of each 1-16th gr.

An Alvine Motor.

Dr. George W. Hoagland, of Columbus, Ohio, write that he uses "Elixir Purgans" (Lilly) with the very greatest satisfaction, and cordially recommends it. This preparation is used extensively in Carney Hospital and the Lying-in Hospital in this city; Children's Hospital, New York; New York Opthalmic Hospital, and others, while it is held in high esteem by a large number of physicians. Dr. G. A. Jordan, of Worcester, Mass., says it is certainly the best "*alvine motor*" he has ever used and that it gives satisfaction in every instance.—*Mass. Med. Journal.*

Bichloride of Mercury as a Germicide.

Dr. H. E. Stroud, of Grand Junction, Col., reports several cases (*South. Med. Rec.*, Dec., 1887) attesting the value of this agent as an antiseptic, etc.

Book Notices.

Practice of Medicine and Surgery Applied to the Diseases and Accidents Incident to Women. By W. H. BYFORD, A. M., M. D., Professor of Gynæcology in Rush Medical College, and of Obstetrics in the Woman's Medical College, etc., and HENRY T. BYFORD, M. D., Surgeon to the Woman's Hospital of Chicago, etc. Fourth Edition. Thoroughly Revised, Re-Written and Very Much Enlarged. With 306 Illustrations. Philadelphia: P. Blakiston, Son & Co. 1888. 8vo., pp. 832. Cloth, $5; leather, $6. (For sale by Messrs. West, Johnston & Co., Richmond, Va.

This book has too much title. A hasty glance of the eye over the title-page might lead the observer to think he had taken up "Byford's *Practice*" instead of the "Diseases of Women." As compared with former editions, the present one is so nearly re-written and so fully illustrated as to leave the impression that this fourth edition is simply a remote cousin rather than an immediate offspring. We do not know that we should except any of the several excellent works on gynæcology now popular, in expressing it as our

opinion that, for the general practitioner at least, this fourth edition of Byford's "Diseases and Accidents Incident to Women" is the best book published on women's diseases—whether medical or surgical. The descriptions are good; the illustrations are well drawn and *apropos;* the diagnostic guides are plain, and the suggestions as to treatment are sensible and practicable, and withal are mostly the outcome of a ripe experience. For the present, at least, Drs. Byford's book takes the lead as the student's and as the practitioner's text-book.

What To Do in Cases of Poisoning. By WILLIAM MURRELL, M. D., F. R. C. P., Lecturer on Pharmacology and Therapeutics in Westminster Hospital, etc. Edited by FRANK WOODBURY, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine, Medico-Chirurgical College of Philadelphia, Pa. Published by Medical Register Co., Philadelphia. 1887. Cloth. 12mo. Pp. 158. (From Publishers,)

This excellent book appeared in the form of a serial article in *Medical Register.* Everything is plain and is thoroughly practical. It should be "the book upon the table" of every practitioner, for when he needs it he will be apt to need it quickly. It will be of service to him in many cases.

Text-Book of Therapeutics and Materia Medica. By ROBERT T. EDES, A. B., M. D., Professor of Materia Medica and Jackson Professor of Clinical Medicine in Harvard University, etc. Philadelphia: Lea Brothers & Co. 1887. 8vo. Pp. 552. (From Publishers.)

What the author says about individual drugs, etc., in this book is good enough; but in many particulars he fails to go far enough to lead us to think that this is the equal of many other text-books for students and practitioners. Simply for college students it will do well enough; but it is entirely too scant in therapeutics to serve the purposes of the practitioner.

Rectum and Anus: Their Diseases and Treatment. By CHAS. B. BALL, M. Ch., Univ. Dub., F. R. C. S. I., Surgeon to Sir Patrick Dun's Hospital, etc, With 54 Illustrations and 4 Colored Plates. Philadelphia: Lea Brothers & Co. 12mo. Pp. 410. Cloth. Price, $2.25.

This is one of the well-selected "Clinical Manuals for Practitioners and Students of Medicine" that Messrs. Lea Brothers & Co. have been publishing for some time past. The book under present consideration is an excellent one, and no general practitioner either of medicine or surgery would do wrong to get it. To him who is paying anything

like special attention to the diseases of the rectum and anus it is an essential. Many important sections are introduced concerning diseases higher up the bowel, such as strictures, strangulations, etc., and operations of colotomy, etc., are described.

Cyclopædia of Obstetrics and Gynecology. (12 vols., ,price $16.50.) Vol. V, containing: "Gynecological Diagnosis; General Gynecological Therapeutics," by R. CHROBAK, M. D., Professor of Gynecology at the University of Vienna; and "Electricity in Gynecology and Obstetrics," by EGBERT H. GRANDIN, M. D., Obstetric Surgeon to the N. Y. Mateonity Hospital. With one hundred and sixty fine wood engravings. New York: William Wood & Co. 1887. Cloth. 8vo. Pp. 390.

This book is an excellent one as a useful guide to the practitioner in conducting his examinations, and greatly aiding him to arrive at the proper diagnosis before venturing on treatment. But Part II, on "General Gynecological Therapeutics," falls into the error of omission, which most books on a specialty commit. It teaches almost altogether local applications, when it is of daily occurrence that many of the diseased conditions of the womb and its appendages pass away under judicious systemic treatment, just as do many diseases of other organs under *general* or *systemic* treatment. Part III, by Dr. Grandin, is an excellent and valuable chapter on the various uses of electricity in the practice of obstetrics, as well as of gynæcology.

Cyclopædia of Obstetrics and Gynecology. (12 vols., price $16.50.) Vol. VIII, "Diseases of the Ovaries," by Dr. A. ALSHAUSEN, Professor of Obstetrics and Gynecology at the University of Halle. Thirty-six fine wood engravings. New York: William Wood & Co. 1887. Cloth. 8vo. Pp. 415.

The special excellence of this volume, as we take it, consists in the chapter (XXII) on "Differential Diagnosis of Cystomata," from eighteen other conditions, which are the most likely to be mistaken for cysts of the ovaries. The special value of this chapter, in conjunction with the succeeding one on "Diagnostic Puncture and Incision," will be the more appreciated when one is reminded that "there is hardly any tumor of the abdomen which has not been mistaken for an ovarian tumor." All the usual operative procedures for the removal of ovarian tumors are well described, so that a surgeon of experience in any other departments of surgery would feel that he had a competent guide

in the present book to perform his ovariotomies or laparotomies. "Battey's Operation" is spoken of as "castration." The author manifests the usual Continental prejudices in his unwillingness to accord to the illustrious American author of the operation his due mead of praise and credit for so well defining the principles which should lead one to decide upon performing "*Battey's* Operation."

Operative Surgery on the Cadaver By JASPER JEWETT GARMANY, A. M., M. D, F. R. C. S., Attending Surgeon to Out-Door Poor Dispensary of Bellevue Hospital, etc. New York: D. Appleton & Co. 1887. Demi 8vo. Pp. iv—150. (For sale by West, Johnston & Co., Richmond.)

This is an almost invaluable guide book for the student or the inexperienced surgeon, or operative gynecologist. Every one who can possibly do so should practise all the operations described in this book on the cadaver, using this manual as a teacher. The language is terse, but fully descriptive of the methods to be pursued. We recommend this book to every Doctor who is not already an expert in making examinations and in operative work.

Editorial.

Medical Department of the University of Virginia.

We are sure a large proportion of our subscribers will read Dr. Barringer's excellent Address in this issue with interest Its historical value regarding one of the very best institutions of education in the world makes it worthy of preservation. With such a standard of excellence as this University has adopted and maintained, there is but little ground for fear that its graduates will fail in examinations before Boards of Examiners, etc.

Medical Examining Board of Virginia.

According to the law of Virginia, which went into effect January, 1885, every applicant for license to practise medicine or surgery, etc., in this State has to pass a satisfactory examination before the State Medical Examining Board. The good effects of the Board are already clearly evident to even the most casual observer; and, sooner or later, with perfections in the law, it will supply the people with only those doctors who are competent to assume the grave re-

sponsibilities of the physician. The professional tone of the practitioners of Virginia will likewise be elevated, and a stimulus will be ever present, as the desired results of the law multiply, to urge on to scientific investigation, discovery, and advancement.

The Virginia Board, so far as the regular profession is concerned, is composed of three Examiners from each of its Congressional Districts, and two from the State at large. These thirty-two members are selected by the Medical Society of Virginia, and commissioned by the Governor for a term of four years. The term of the present Board, expires December 31st, 1888, or when "their successors are appointed." The Board now in office, as a result of three years' experience, recognize the importance of certain changes in the law. The sitting Legislature is the only one that can enact amendments in it for the next two years (as the Virginia General Assembly meets biennially instead of annually). The Board, therefore, *now* recommends that the law be amended so as to require candidates to appear before one or the other of its *semi*-annual sessions, instead of allowing them to go before three individual Examiners (of the 32) of their own selection during the vacations of the Board. This proposition received practically the unanimous approval of the Medical Society of Virginia at its recent session, and a Committee of the Society was appointed to assist the Committee of the Board in securing the suggested legislation.

The reasons for this change in the law commend themselves to the good judgment of any reflecting mind. In the *first* place, when examinations are held before the Board in session, there is practically no chance for any candidate, who may possibly have a cheating disposition, to exercise that mean propensity of his nature. For after he enters the examining room, he is not allowed to retire until that examination is over, which cannot exceed a period of three hours. Being in the presence of fellow-candidates and of Examiners, he would be a bold rascal who would undertake clandestinely to consult any *vade mecum* or text-book he may have secreted about his person in coming into the room. Besides, before retiring, as he hands in his papers on each examination, he has virtually to sign a pledge that he has neither received nor given information illegally, etc. But abundant opportunities for deceit and fraud present themselves to the candidate when the examination is by individual Examiners; for it is generally in the offices of the Examiner, at their homes, where text-books, etc., are

on the table and shelves around. The Examiners, however, have then their personal duties to attend to; and after giving the candidate a list of the questions, they have to leave their offices to attend to their out-door practices, thus leaving the candidate alone, it may be for hours, surrounded by handy and tempting books which will furnish the very answers he wishes to make. The temptation, it is feared, is sometimes too great for the candidate to resist. At all events, "Lead me not into temptation," is a part of the Lord's Prayer.

Secondly. When examinations are held before the Board, in session, there is no opportunity for an Examiner to exhibit personal partiality in rating the value of papers handed in. For when a candidate enters the examining room, he is given a number, which number is known only to the Secretary of the Board and to the candidate. Instead of signing his name, or other word by which his identity, or the college of his graduation, can become further known, the candidate signs simply his number. So that the Examining Committee, instead of examining and rating the paper of "Dr. Jones" or "Dr. Smith," examines and rates the value of the paper marked "No. 7" or "No. 23," as the case may be. Who "No. 7" or who "No. 23" is, there is no ordinary possibility of the Examining Committee finding out until after the examinations are all over, and the *results announced.* In short, every reasonable means is taken to compel a fair and impartial examination. But when an examination is held before individual Examiners at their homes, out of session of the Board, it is impossible to prevent the identity of the candidate from becoming known to the Examiner. The Examiner and candidate have to meet face to face, and generally under the embarrassment of the candidate being the *guest* of the Examiner. In many instances, indeed, the candidate brings letters of introduction to the Examiner from some intimate friend, in which, in some cases, flattering allusions are made to the candidate, and even appeals for leniency and favors, on the score of "old, tried and true friendships," are pleaded in his behalf.

Every one of material experience and observation, possessed of common sense, knows how influential such introductions frequently are—even unconsciously—upon those who earnestly wish to do officially right. If such things are not known or believed by the candidate to be influential in his favor, why does the latter-day experience of the Board

show that candidates so generally avoid going before the Board in session at places well provided with hotels, etc., at less expense, and with great economy of time; but put themselves to greater expense of travelling to three different points of the State, losing more than triple the time required by the formal examinations before the Board in session, and submitting themselves to the greater personal inconveniences of stopping over at poorly provided country inns, or thrusting themselves upon the courtesies of doctors and their families in the country upon whom they have no claim? The answer is too patent to require a comment.

Thirdly. The matter of social imposition upon the Examiners, in some instances, is necessarily too great under the present law. Whatever of truth there may be in the political doctrine that all men are born free and equal, the common sentiment of all society proclaims the doctrine untrue in its application to social rank and recognition. But under the present law, a candidate can go before any three of the 32 Examiners that he may select, on any day he chooses, and demand examination. Some Examiners reside remotely from hotels or boarding-houses, and hence, under the impulse of humanity, have to provide lodgings and meals for the candidate at their own homes, inconveniencing their families and possibly almost necessarily admitting into their home circles, more or less socially, parties that could not consistently be recognized in such a relationship under other circumstances. So annoying and burdensome had this grievance become that the motion for abolishing individual examinations came from, and was urged by the country members of the Board.

Fourthly. The embarrassments of the system of "individual examinations," as at present allowed, as indicated in the last two reasons, make the office of Examiner undesirable, however much of a compliment may be intended by the voters who elect him; and without the removal of these drawbacks, it is probable that, sooner or later, the competent Examiners who may be elected hereafter will have to be persuaded to take the position from a sense of duty, instead of accepting them as positions of eminent honor. Already we hear of a number of the present Board who will decline re-nomination when their terms expire a year hence, unless some change is made in the law as it now is.

When this matter was under consideration by the Medical Society of Virginia some members of that body thought a reduction of the number of the Board at least one-half would

be an improvement in the law; and in fact a resolution was almost unanimously adopted urging this amendment. We fail to appreciate any special value in such an amendment, constituted, as the Board now is, of representatives from each of the Congressional Districts of the State. In fact, a reduction in the number of the Board, if the system of individual examinations is allowed to remain in its present form, would simply double the frequency of embarrassments and duties now falling on each Examiner out of session of the Board. Outside of some such consideration as this the proposition seems unimportant, and we would be willing to adopt it or not according to the wishes of a majority after a full consideration.

Another resolution adopted by the Society, in a moment of hasty consideration, asks that the law be so amended as to require candidates to be graduates of regularly chartered medical colleges. Such an amendment is inconsistent with the spirit of the law establishing the State Board of Medical Examiners, which practically asserts that the diplomas of the colleges are not in themselves sufficient evidence of proficiency, and therefore demands that the holders of such diplomas shall undergo examinations by the Board before being allowed licenses to practise.

That there is need for an Examining Board outside of the diploma-granting authorities is clearly shown by an examination of some of the papers of parties who have come before the Virginia Board and been rejected. The matter-of-fact answer, "Don't know," to many of the most elementary questions is simply amazing; and the disinterested reviewer can only wonder how it was the candidate received a diploma of graduation from any respectable college. As samples of other answers given by *graduates* of respectable colleges who have come before the Virginia Board, we take at random the following: Tests for arsenic, "sulphuretted hydrogen is one—don't know rest." What is the chief function of the liver? "Do not know." Dose of tartar emetic? "Ten grains." Dose of bichloride of mercury? "One grain." Dose of sulphate of atropia? "Ten grains hypodermically; by mouth, 60 grains." Dose of powdered cantharides? "Forty grains." The peritoneum "is a serous membrane lining the belly and extending into the chest, covering the heart and lungs." The larynx "is composed of cartilage; the esophagus passes through the larynx." "The duodenum empties itself into the ilium." "The renal artery enters into the formation of the portal

circulation." Iodine "is dug out of the earth in blocks like iron." Dengue, according to four candidates, is "a fever that comes on soon after the bones are broken;" according to another applicant, "the patient should be cautioned against moving for fear the bones should break." Placenta prævia? "Don't know what it is." "Atheroma is a cystic tumor," etc., etc. The above and many like answers are to be found among the papers of *graduates* of colleges, now on file in the office of the Secretary of the Board; and yet say that *graduates* ought not to be examined?

We say it with congratulations to the profession of Virginia that the Faculties of both of the medical schools of this State are on record as favoring the existence of a State Medical Examining Board. The University of Virginia especially has always taken a commendable view of the whole subject. The Medical Faculty of that institution simply asks the Board for its standard, which is 75 per cent., and promises the profession that its standard of graduation will be sufficiently high to prevent its graduates from being rejected; and its promise has been faithfully kept up to the present time.

We regret that the students of the Medical College of Virginia through a committee of five of their number should have permitted themselves to go on record as formally petitioning the present Legislature of Virginia to do away with examinations of graduates of Virginia Colleges. We are glad to learn there is no such petition from the students of the University of Virginia, and it is to be said to the credit of the few of the students of the Medical College of Virginia who declined to sign the petition of their fellow students, that they recognize the importance of a State Board of Medical Examiners, and are willing to submit to its decisions. The formal petition of the students of the Medical College of Virginia as presented to the Senate of Virginia, is so filled with misstatements of the entire facts in the case that it is plain the students need instruction as to the origin, purposes and conduct of the Board of Examiners before it is possible to show them the fallacy of their argument. They seem to forget that the Medical Society of Virginia is composed in great part of the fathers who hope to see their sons come on in their day to take their places in the profession; and that these fathers have at least natural affection enough to seek to perfect that law by which they expect their sons to be tried. Their petition implies the idea that their professors are the leaders of medical discov-

ery and opinion in their section; while, in fact, we dare say, without intentionally reflecting upon their professional ability, that they would scarcely think of laying down any such claim for themselves. Such a sentiment, however, as these students seem to have, we are aware, is the common error of students in many other Colleges. It is unfortunate that these students did not submit themselves to counsel before exposing their weak points, or, having a counsellor, that they did not have a more judicious one. Their petition has been exceedingly unfortunate too in making gratuitous assertions about some members of the Board, with whom they are scarcely acquainted, and of whose actions and motives they know nothing. Surely these students have been misled, and have developed prejudices, and are to be forgiven on the ground that "they know not what they do."

It is an important matter for consideration by the Virginia profession and people that, whatever may be the defects of the laws of remote States, *our adjoining State*—North Carolina—singularly omitted from the list of States enumerated in "the students' petition" as having laws relative to examinations of applicants for license to practice, has an Examining Board as rigid in their examinations as that of Virginia. The North Carolina Board meets not oftener than twice a year, one of these sessions being held at the time and place of meeting of their State Medical Society. If a candidate who could not come before the Board in session because of a satisfactory reason, applies for license to practise, outside of a semi-annual meeting of the Board, he has to stand a satisfactory examination before two members of their State Board, who grant him only a *temporary* license, which is so limited as to cover the time up to the next meeting of their Board, before which Board *in session* the candidate has then to pass his examination, which has a high standard. For instance, of the 48 applicants for license at the annual session last May, 14 were rejected on their examinations. If an adjoining State has adopted such a meritorious course for the protection of its people from the impositions of incompetent practitioners, it is surely unwise for Virginia to surrender any vantage ground it has gained over the prejudices of its uneducated classes.

[Just as we are going to press, we learn that the House Committee of the Legislature has reported almost unanimously, *adversely* on the petition of the students of the *Medical College of Virginia;* and *favorably* on the resolution of

the State Medical Examining Board, as endorsed by the Medical Society of Virginia. A well considered provision in the report also provides that in the rare emergency cases that may arise by reason of sickness or other inability of the candidate to appear before the Board in session—"said emergency to be determined by a Committee of the Board in each case"—then the candidate may be examined by a *Committee* of the Board in session, said special Committee to be appointed by the President of the Board with reference to the conveniences of locality, etc. Such a provision, it seems to us, meets every reasonable objection that can be raised against the desired change in the law.]

Dr. Harvey Black,

Upon whom Dr. Hunter McGuire operated for stone in the bladder by the high operation (supra pubic) some weeks ago, is nearly well, and will in a few days leave St. Luke's Hospital, in this city, for his home in Marion, Va., to resume charge as Superintendent of the Southwestern (Va.) Lunatic Asylum.

The Medical Investigator

Is a 24-page weekly journal, announced to be begun the first Wednesday in January, 1888, at $2 a year. Address Dr. S. F. Smith, Louisville, Ky. We have not yet received a copy.

Messrs. Eli Lilly & Co.,

Of Indianapolis, Ind., will forward, on application of any of our subscribers, a copy of their price catalogues of drugs, etc., for 1888, containing also various formulas of preparations, etc.

Medical World Visiting List.

This is something new in the way of "a daily record of practice and accounts, without the use of signs, and hence need no transferring." The cover is of leather, with pockets, and with an erasable pencil slate on second inside page. Small removable pamphlet-books, or tablets, of 46 pages each, are fitted in the cover. Each page of the tablet is arranged, from top to bottom, as follows: Month of ———, 188—. On the left-hand margin in successive writing lines are the dates of the month. Then the page is divided into two columns for the record of the kind of services rendered

and the amounts charged opposite each day of the month. At the head of each column is space for entering the name and address of the patient. At the bottom are spaces for totals, credits and balances. Each tablet allows of entries for 172 patients a month. This "List" calls for the entering of items in words instead of by signs, and hence renders records legal before the courts, without transferring to a ledger. The value of *signs* in visiting lists is not recognized by the courts. This List is well suited to the pocket, and seems to be a very useful and an economic one. For sale by *The Medical World*, 1520 Chestnut street, Philadelphia, Pa. Regular price, $1.50; for a short time, as an introductory price to subscribers to *Medical World*, $1.

Messrs. Hazard, Hazard & Co's Exhibit.

In our mention in November No. 1887, of the Exhibition of Pharmaceutical Products, etc., during the recent session of the Medical Society of Virginia, we omitted reference to the handsome display by Messrs. Hazard, Hazard & Co., of New York City, which consisted principally of elegant elixirs, cod liver oil made from fresh *livers* on the sea-shore, not hake or haddock oil, emulsion cod liver oil with pepsin and quinine; hypodermic tablets that will dissolve; tablet triturates—*porous* masses that will dissolve in one-half the time that compressed tablets, recently labeled compressed triturates, will; absorbent cotton, that will absorb; olive oil, absolutely pure for medical and surgical use.

Dr. L. Lankford

Has moved from Southampton County, Va., on account of protracted illness in his family, to Culpeper, Va. He has left a large and influential practice, and goes to a new home with the best wishes and highest testimonials of his many warm friends and professional brethren of his former county. Because of his worth as a practitioner, and the distinction he enjoys in the profession of his State, we are confident he will soon establish himself in Culpeper, Va., as one among the best of the several excellent doctors of that section. His change of residence from one Congressional District to another compels him to resign his connection with the Virginia State Medical Examining Board; but he will not lessen his interest in maintaining its high position because of his resignation. The Executive Committee of the Medical Society of Virginia will, at an early day, nominate his successor to the Governor for appointment.

The New York Academy of Anthropology,

Incorporated in 1885, has for its object the study of *Anthropology* in a strictly scientific manner. A prize of $50. is to be awarded for the best original essay on any subject within the domain of Anthropology sent to the President, Dr. Edward C. Mann, 128 Park Place, Brooklyn, N. Y., on or before April 1, 1888. All details of the award will be made known on immediate application to the President.

Harrison & Pierce

Is a new firm of Pharmacists in this city, No. 1 West Broad street, who propose to extend their business throughout this section. The firm is composed of Mr. R. H. M. Harrison, who had established a good business at the present stand, and Mr. John W. Pierce, late of Polk Miller & Co., who has made for himself an enviable reputation all over Virginia as a careful and progressive pharmacist. Among other things to make their new firm fully equal to the demand of the times, they will carry a full line of the preparations of Parke, Davis & Co., the standard of excellence and purity.

Professor Fauvel on the Vin Mariani.

Prof. Ch. Fauvel, 12 Rue Guénegaud, Paris, France, in a letter under date of December 8th, 1887, writes to the Editor of the *New York Medical Journal:* "Will you kindly have it announced in your journal, in justice to myself before the medical profession, that the various notices appearing in journals and circulars quoting my name in connection with coca are entirely false, and in every respect a prevarication. The only preparation of coca employed by me with undoubted and uniform success has been the so well-known *Vin Mariani*, which, since 1865, I have had occasion to prescribe daily in my *clinique*, as well as in private practice. My opinion of this valuable medicament, together with those of many of my *confrères*, has during many years been frequently made known for the benefit of the profession in various writings, and it is but just to this worthy preparation that it receive all honor due. I thank you for compliance with my request."

Wm. R. Warner & Co's Sugar-Coated Pills.

Cablegram, London, Oct. 25th.—W. R. Warner & Co., Phila., received highest reward from American Exhibition in London, for superiority of their sugar-coated pills and effervescing salts.

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Original Communications.

ART. I.—**Toxic Alkaline Urine.*** By HUGH BLAIR, Ex-President of Virginia Pharmaceutical Association, etc., Richmond Va.

The acidity of the urine is due, almost entirely, to acid phosphate of sodium.

It would seem strange that an acid fluid should be secreted from the alkaline blood. Dr. Ralfe ascribes the proceeding to the reaction between two substances found in the blood. Bicarbonate of sodium, which is the acid carbonate, and the neutral phosphate of sodium, resulting in carbonate of sodium which remains in the blood, and acid phosphate of sodium, which dialyses into the renal apparatus.

The neutralizing power of 30 grains of oxalic acid represents 24 hours acidity of the normal urine.

Uric acid is so feeble in its reaction that it is not able to discolor blue litmus paper. Normally, after urine is passed, if acid, it increases in acidity until the 3rd day. By that time urea begins to be decomposed, and the urine becomes alkaline from the presence of carbonate of ammonia. Carbonate of ammonia, when present in the urine, is derived from the decomposition of urea—one equivalent

*This paper was prepared by request of the Richmond Medical and Surgical Society, before which it was read Feb. 16, 1888.

of urea unites with two of water urea $CO(NH_2)_2+2H_2O=CO(O.NH_4)_2$ Urea is carbamide, or biamide of CO_2.

Urea does not decompose into carbonate of ammonia in the bladder, or out of the bladder, until it is brought into contact with the ammoniacal ferment, nor does this decomposition take place when the ferment is introduced into the bladder if the mucous membrane is in health.

The name micrococcus ureæ has been been bestowed on this ferment. $\frac{52}{100\,000}$ths of an inch is the diameter, and there is as much room for this ferment to pass up the urethra, as somebody has said, as there is for a man to roll a wheelbarrow through the Thames tunnel. Sometimes the unclean catheter conveys the ferment to the bladder.

Pasteur is "inclined to the belief that the decomposition of urea is not possible, without the presence of this ferment, and that there is no purely chemical reaction in the human body capable of giving rise to ammonium carbonate in the urine."

Carbonate of ammonia is not, by any means, the only alkali found in the urine. Alkalinity of the urine may be due to the presence of soda, potash or the alkaline phosphates. Diminished secretion of bile is sometimes a cause of the accumulation of fixed alkali carbonates in the blood and consequently in the urinary secretion.

Oxidation of the fatty acids, when the result of dyspepsia fermentation, forms carbonic acid, and this uniting with alkali bases reaches the kidneys, neutralizing acidity. Carbonates, often found in the urine of convalescents from acute diseases, have the same effect.

We once had the opportunity of examining a specimen of urine, which behaved toward reagents like a strong solution of carbonate of ammonia. The strange fact connected with the case was the apparent health of the patient, who was a well known physician of this city. We could not hear that he had any cystic trouble. The ammoniacal character of the urine was persistent.

The celebrated Lionel Beale gave one of his patients carbonate of ammonia for cystine calculus and diathesis. The patient gradually increased the dose until 50 grs. 3 times a

day after meals were taken. For 3 years 1050 grs. of carbonate of ammonia was taken every week. No harm came to the patient and the trouble ceased. Dr. Beale takes the opportunity to advise physicians to use ammonia freely in reforming drunkards.

The presence of the fixed alkalies is conducive to the change of urea and the resulting carbonate of ammonia. After all, it is the ammoniacal urine that gives trouble. This is it which accompanies, or is the result, or the cause of the grave lesions which make the human bladder, especially, and also, the connecting channels, so often a source of torment to its possessor.

As far back as the time of Dr. Golding Bird it was recognized that the urine when rendered ammoniacal acted as an irritant on the mucous membrane of the bladder, exciting a form of inflammatory action; and the result of the secretion of a large quantity of mucus of a more viscid character than usual. By persistence of the irritation, puriform mucus is at length poured out, and this, from the chemical influence of the carbonate of ammonia, becomes changed into a viscid, almost gelatinous, mass, sometimes so tenacious as to form long tough ropes of mucus capable of being drawn out to the length of several inches without breaking. The formation of this matter greatly adds to the patient's sufferings by preventing the ready escape of the urine even when the contractile power of the bladder is not quite paralyzed.

Dr. W. Howship Dickinson, of St. George's Hospital, in his new work, "Renal and Urinary Affections," under the head of Abscess of the Kidney, says: "Looking first at the urine as directly connected with the origin of the disease it appears that three conditions usually concur—retention, ammoniacal decomposition, and admixture with products of mucous inflammation. Of these the essential circumstance appears to be ammoniacal decomposition, which retention may induce, and cystitis either precede or follow." Again he says: "The simple presence of pus or mucus in the urine, though lasting for years, does not appear to set up the renal disorder so long as the urine retains its acidity and

resists putrefaction. I have myself known no instance in which the mischief has arisen except in connection with ammoniacal urine. The ammoniacal change, however, though it may arise independently of mucous inflammation, produces it so constantly that the origin of the disease is always thus complicated."

This ammoniacal decomposition of the urine is accompanied with the appearance of abundant prisms of ammonio-magnesian phosphates, as also with amorphous phosphates, which are a source of constant irritation to the surface of the urinary organs, just as a stone in the bladder will be, though, of course, not to the same extent.

We cannot say that these triple phosphates are never found in the urine before it is decomposed.

We recently made a urinary analysis for a gentleman of this city. The reaction was neutral or barely alkaline. No ammoniacal decomposition could be detected, no pain or disturbance of the urinary organs; no mucus; no pus—only a very free passage of urine and a large number of triple phosphates. He had been in the habit of daily using an alkaline water in full quantity.

There are cases where the urine, in spite of treatment, continues to be alkaline, and as a consequence, the earthy phosphates are deposited upon the mucous membrane of the bladder and the other urinary apparatus.

Dr. Lionel Beale, in his last work, says: "This process not unfrequently results in complete disorganization of the mucous tract, and generally leads to a serious state of things. Not uncommonly portions of the deposit become detached, and receiving earthy phosphates upon their surface, layer after layer, concretions of a soft and very brittle character, but not unfrequently, of considerable size, may be formed."

One of the members of this Society has such a patient. We do not know how many more have the same. At the instance of his physician we have made several examinations of this gentleman's urine. There was no renal disease, but cystitis was very plain, yet the amount of pus and mucus was comparatively small There was a predominance of amorphous phosphates. The urine was alkaline. On his

first visit he walked the floor in agony. Any conversation of a professional nature was freely allowed by his physician. He was told that acids were his friend and that he need not expect relief until his urine became acid. In a few days we met him on the street. With a good deal of fervor he exclaimed, "we have at last succeeded!" "In making your urine acid, we suppose?" "Yes. And you are greatly relieved?" "Infinitely." "How did you do it?" "By taking Horsford's Acid Phosphate." Taking Horsford's Acid Phosphate meant taking phosphoric acid.

Recently this gentleman brought for examination a medium sized pill box full of a substance that looked like glue. It was deposited from his urine, and he had dried it in the sun. It proved to be mucus and phosphates. He said that being away from home he could not get palatable food, and that he had gorged himself with pickled cucumbers. The result was acid urine, and the dislodgement of this deposit from the surface of his bladder.

Just here let us say that there seems to be some difference in the opinions entertained by members of the profession with regard to the action of the acids, organic and inorganic. Until lately it was taught that the urine was to be made acid with the mineral acid, because the salts of the vegetable acids were eliminated as carbonates. Now, in a hand-book used by the medical students of the University of Virginia, it is said that the mineral acids form quite stable salts with the alkaline bases and never reach the kidneys.

Dr. Dickinson, before quoted, says he has gotten the best results with the mineral acids, especially the sulphuric.

Benzoic acid and the benzoates appear in the urine as hippuric acid. Boracic acid and some other remedies prevent decomposition by their antiseptic properties. Benzoic acid, also, has valuable antiseptic properties. Some gentlemen here have found lemonade, as prescribed by Sir Henry Thompson, to prevent the formation of the phosphates and deposit of the same on the sutures and catheter in vesico-vaginal operations. Why should not lemonade and other vegetable acids be servicable to prevent phosphatic deposites on the surface of the bladder? Before we leave the subject

let us say that the triple phosphates may be formed and deposited in urine that has an acid reaction. This statement may be disputed, so we beg leave to give our reason for the statement.

A lady who had for some months been suffering from hæmaturia, was sent to this city by her physician, to one of the members of this Society, for treatment. Her doctor wrote that he had tried various treatments without success. Upon examination of her urine we found the chief pathological feature, besides the blood, to be large crystals of triple phosphates. This would have been a very common occurrence in alkaline urine—but, the urine was acid. The diagnosis was immediately made: Traumatic hæmorrhage of the kindey by reason of the presence of crystals of triple phosphates in the pelvis, perhaps in other parts of the kidney.

The diagnosis was accepted by the Richmond physician. The urine was made still more acid by appropriate remedies, and kept acid for a sufficient time. The crystals were dissolved out of the renal organs. The perchloride of iron treatment followed, or was combined, and in about ten days the patient went home relieved. Two other cases, diagnosed as above, in this city, recovered on treatment by other physicians.

The Lettsomian Lectures, by Dr. Reginald Harrison, of the Liverpool Royal Infirmary, were published in the New York *Medical Record* in the last month. The first lecture opened with urine fever and toxic urine. Dr. Harrison maintains that "urine fever, or urethral fever, is the product of a definite poison introduced into the system;" that the symptoms, sometimes fatal, are produced by contact of the urine, but more particularly of inclosure of the urine, against some part of the urethral tissue where there is a solution of continuity.

He says that urine, even in small quantities, when pent up in a recent wound, is always the cause of fever resembling ague. He thinks that the secretions of living beings are capable of forming leucomaines, which are alkaloid bodies having poisonous properties, and that many phenom-

ena connected both with health and disease may thus be accounted for. Quoting from Guatier, he says: "Of all the extractive composite residua, the alkaloids of animal origin are worthy of the deepest interest." They claim our special study from the fact of their constant presence in normal secretions, and must be classed with the most active agents known. From my observations (continues Dr. Harrison) in connection with the surgery of these parts, it seems probable that the development of urine fever is really due to the absorption of some such poisonous compound, as an alkaloid, which is derived either from urine, or tissue, or wound decomposition, or from all combined.

Dr. Harrison's remedy is puncture and the drainage-tube to prevent urine contact, but he freely commends sterilizing the urine by antiseptics, and testifies to the value of boracic acid and quinine as antiseptics in connection with operations on the urinary apparatus.

Dr. Dickinson also suggests that ammoniacal urine may be only the vehicle of the especial virus. Dr. Dickinson, in his "Renal and Urinary Affections," reports the case of a woman who was brought to the hospital on account of a broken leg. It was necessary in two days to introduce a catheter. The urine drawn was acid and healthy. After the introduction of the catheter there was a rapid change; the urine became ammoniacal and was full of bacteria; pus was formed. Severe fever came on, and in three days the woman was dead —a warning to all who use the catheter to disinfect the instrument.

The natural urine is feebly acid, varying in acidity within a short range. When much excess of acidity prevails, the urinary organs become irritated, and uric acid, sometimes oxalic acid, is precipitated. Much discomfort may result to the patient, but the physician can easily correct the disturbance. Acid urine is unfriendly to the life of the alkaloid leucomaines or ptomaines, which accompany albuminoid degeneration. But, the urine that accompanies, or is the result of, or is the cause of the grave lesions of the urinary apparatus (we do not now speak of Bright's disease) is the

alkaline urine, more particularly the ammoniacal phosphate urine.

We have nothing to say about treatment. It is not our province to instruct the learned and experienced members of the Richmond Medical and Surgical Society how to meet the indications of disease. Dr. Lionel Beale says: "We may bring the urine into such a condition that it will actually exert a soothing effect upon the mucous membrane and promote the healing of any superficial ulcers that may be present."

To the same effect one whose name carries authority on medical subjects remarks, that "the best way to restore the mucous surface of the urinary apparatus to health is to restore the urine to its normal condition."

ART. II.—**The Relation of Alcoholic Inebriety to Diseases of the Mind and Nervous System.** By EDWARD C. MANN, M. D., F. S. S., President New York Academy of Anthropology; Vice-President International Congress on Inebriety, London, 1887; Physician to Sunnyside Private Hospital for Inebriates, the Morphine Habit and Nervous and Mental Diseases, Brooklyn, N. Y.

Alcoholic inebriety is intimately connected with, and is one of the main causes of diseases of the mind and nervous system.

There is an almost universal opinion that moderate drinking is true temperance, and that an abundance of light wine and beer means little or no inebriety. Perhaps there is no country in the world where light wine has been so abundantly and so universally drunk as in France, and we will, therefore, take France as the typical example as to whether or not a century of moderate drinking of light wine injures individuals and natures, and induces the disease of alcoholic inebriety.

In Paris, June 24th, 1887, the Senate discussed the report of the committee on consumption of spirits. M. Claude said that the committee had come to the conclusion that the drinking of spirits in France had reached such a height as to be a social danger. M. Ranvier approved the report.

To the writer, this report is full of significance. It means, we think, just this: That at first the use of light wines satisfies the desire for stimulants, but that, with a rapidity modified by the neuropathic tendencies of the daily habituate, what is at first a moderate, healthy desire perhaps, becomes an increased, augmented and insatiate demand for not only the stimulus of wine but for some stronger stimulus; so that spirits are resorted to, to produce the same amount of stimulation which at first wine produced. It is, we think, the peculiar property of alcohol to beget, in those who daily use it even in moderation, the *alcoholic appetite*, especially if they inherit a neuropathic diathesis. The same is true of morphine, chloral, cocaine, etc. With the modern nervous system of the Frenchman, the Englishman, and particularly the American, where the tendency to alcoholic inebriety is not hereditary and evolved with the natural evolution of his organism, as it often is, it is, in our opinion, very easy to induce the disease, by moderate drinking, and get up a morbid condition of the organism manifesting itself by an illusory or hallucinatory organic impression or concept, deluding and misleading in its character, and wrongly influencing and affecting the conduct of the individual either in thought or action, or both.

In a man or woman neuropathically endowed, the disease of alcoholic, or opium, or chloral inebriety is easily induced, and is difficult of cure, as there is induced by the alcohol a subjective morbid state in the organism in the nature of deranged organic or special sensation or impulse. Organic feelings, as Hughes has well said, mislead the mind and may prove as delusive as special-sense subjective perversions, misleading the mind, so that it acts in a manner neither natural to the individual nor to the normal type of that individual. The essential condition in alcoholic inebriety which makes of dipsomania, a true periodical insanity, is the changing and misleading subjective impressions of the alcoholic inebriate, coupled with the resultant change of conduct or of reasoning, or of both. Alcohol gets up the abnormal condition of the organism which deranges the normal display of psychical function and causes the de-

parture from what we recognize in the individual, or in the healthy member of his family, as natural healthy mentality. The victim of alcoholic inebriety is misled and perverted in the exercise of his psychic powers by conditions of the system induced by the disease produced by alcohol.

In the last report of the Department of the Seine in France, their deductions are, that 27.4 per cent. of all cases of mental disease are due to alcoholic excess. In the report of the Scotch Commissioners for 1871 their deduction is, that 19 per cent. of all cases of insanity are due to alcoholic excess. The late Dr. Kirkbride, the distinguished alienist, and Superintendent of the Philadelphia (Pa.) Hospital for the Insane, made deductions based on the admissions to his hospital for 31 years, (most valuable statistics) showing that 22 per cent. of males, and 2 per cent. of females had become insane through alcoholic inebriety. While the consumption of alcohol in France doubled between 1849 and 1869, the cases of insanity from alcoholic inebriety have risen 59 per cent. with men, and 52 per cent. with women, with a total of 22.31 per cent of all cases as due to alcohol in 1872. M. Lunier estimated that 50 per cent. of all the idiots and imbeciles to be found in the large cities of Europe have had parents who were notorious drunkards. It is a very conservative estimate to make, if we say, calculating percentages upon the total number of admissions, that 12 per cent. of the total number admitted, of both sexes, are due to alcoholic inebriety, and 20 per cent. of the total number of males admitted to all American asylums. Personally, it is my belief that a very much larger percentage of cases of mental disease is due directly to alcohol. The English Commissioners of Lunacy, in their schedule given in the report of 1877, estimate that 14.9 per cent. of all cases are due to alcoholic excess.

The *physiological* effects of alcohol upon the human body are, primarily: Congestion, from want of vaso-motor control; perversion of judgment and will-power, and an absolute prostration of nerve power. Secondarily, they are hypertrophy of the heart, structural diseases of the stomach, brain, liver and kidneys, alcoholic dyspepsia, alcoholic

phthisis, insanity and a multitude of nervous lesions which may end in alcoholic dementia in which personal identity and responsibility are lost, and whose earliest symptoms are loss of memory, failure of speech and manifestations of moral obliquity, delirium tremens, mania a potu, (a more prolonged mania than delirium tremens), and perhaps chronic insanity.

When we object to the use of alcohol as a beverage we do so for this reason: That there is an alarming increase among Americans, and particularly among the refined and cultured classes, of children neuropathically burdened. With these children as they grow up, the use of alcohol as a beverage of course creates a new physiological want, a systemic demand, which becomes peremptory, irresistible and hereditary. The insane temperament may originate in this way and become transmitted. Epilepsy, hysteria and idiocy and insanity may result from the alcohol thirst thus formed and become hereditary. The progeny of such children are peculiarly liable to degenerations of the nervous system. The alcohol habit thus formed is antagonistic to the highest standard of bodily health and vigor, and of capacity for work, manual and mental. We have to-day in the disease of alcoholic inebriety one of the deadliest evils that curse modern society, and we cannot but wonder at the astonishing apathy that exists in regard to the importance of a thorough knowledge of this disease in the daily work of every member of the profession. Every professional man to-day knows that dipsomania is a *disease*, not a *bad habit;* and every general practitioner ought to instruct the public that alcohol penetrates to every part of the human body. That there are but few blood vessels, not a muscle, not an active portion of any of the membranes, not a secreting gland, small or large, not an organ of sense, not a single viscus, whether pelvic, abdominal or thoracic, which is not interpenetrated by alcohol, when the alcohol habit is indulged in. It causes marked changes in the rate and force of the heart's action; in the tonicity of the muscular arteries; causes altered temperature and changes in rate of action in glands and muscles. Also it causes changes in the varied

forms of sensibility from the most general to the most special, and the most grave changes of all in the most exalted of all functions comprised under the head of mind and mental operations, until finally the coördinate function in the brain is overthrown, and the consciousness of personal identity is destroyed.

Alcoholic inebriety is a *disease*, and is curable as these diseases are; and it is our experience that by a careful study of each individual case, and by systematic treatment, the alcoholic inebriate may be permanently cured just as surely as the morphine habituate may be. The lost will power has to be restored and the uncontrollable craving for alcohol cured; and this means building up the centric nervous system from its very foundation, by electricity, cod liver oil, strychnia, malt, and hypophosphites and a judicious use of all the nervine tonics for from six months to a year.

We desire to speak finally of the medico-legal relations of alcoholic inebriety. The principles of law which have been laid down, regulating the legal relations of the inebriate were framed long before we had obtained any accurate ideas respecting the disease of alcoholic inebriety; and therefore great injustice has been done to the subjects of this disease under the name of Law. We think that *the disease of alcoholic inebriety* should be regarded as exempting from the punishment of crime, and under some circumstances at least as vitiating the civil acts of those who are affected with it. We must draw a sharp line between the individual who apparently merely chooses to indulge in alcohol and him who is irresistibly impelled by the craving, often periodical, resulting from a morbid irritation of the cortical sensory centres of the brain, to indulge in alcoholic stimulants thus leading to frequent fits of intoxication. The disease of alcoholic inebriety has its essential psychic and physical signs, and never need be mistaken. There is a modified responsibility in this disease as in other forms of mental disease and the common laws should be codified to recognize the teachings of science. By reason of their impaired responsibility, punishment should not be inflicted on those who commit overt acts in a state induced by the disease of alcoholic in-

ebriety, which either takes away all consciousness respecting the act generally and its relations to penal law, or in conjunction with some peculiar bodily condition, which irresistibly impels the subjects, while partially or completely conscious, to violent acts. Responsibility should be annulled in that condition in which either a consciousness of the criminality of the offence, or the free will of the offender is taken away by disease.

It is important to remember that by the very nature of the disease of alcoholic inebriety, the great diagnostic mark of which is the *irresistible impulse and craving* for stimulants, the person is *involuntarily* deprived of the consciousness of the true nature of his acts. The will is overborne by the force of the disease. The man's free will and moral liberty are taken away from him by the superior force derived from disease exactly as in the periodical insanities. There is no truer periodical insanity than dipsomonia and none which more deserves the protection of our courts.

I have aimed to present clean, authoritative facts in respect to the relations which the disease of inebriety bears to the mind and nervous system, avoiding all the confusing, contradictory and uncertain themes which have so frequently been presented both to the profession and to the public. My opinions I do not entertain in any loose or unreasonable form. They are the result of both an active and a thoughtful acquaintance with the subject.

128 *Park Place.*

ART. III.—**Ceremonies Observed at the Age of Puberty, Etc., Amongst the Calispel Indians.** By EDWIN LEE MORGAN, M. D., Washington, D. C.

The Calispel Indians (a tribe inhabiting the northeastern section of Washington Territory), amongst whom I lived for several years, preserve in their traditions many of their ancient and long since abandoned customs.

One of the most striking of these is one relating to girls when they arrive at the age of puberty. Upon the first ap-

pearance of her catamenia, the girl immediately leaves her family lodge, and wanders about until her absence is noticed, when she is sought out by her mother, to whom she tells what has happened. A separate lodge is then built for her, near the one occupied by the family, and after the same plan, but very much smaller, being scarcely large enough for her to move about in. Of this lodge she at once takes possession, for she is not allowed to return to the family lodge during this period. Even the married women (if the word may be used to designate the Indian unions) always absent themselves from their husbands during the period of their menses.

The first occurrence of the catamenia is one of special importance in the Indian maiden's life, for she is passing from girlhood to womanhood, and she spends a month in observing it, at the end of which time she comes forth a woman, ready for sale or marriage.

During this month she does not leave the lodge during the day, except early in the morning, and then it is to fill a bark bucket with water, and to gather wood, which she brings in from the forest on her back, in the usual Indian fashion, by means of a rope (made of hair, grass, bark or raw hide) fastened around the wood and thrown over her shoulders. This material she places near the entrance to lodge for the use of her family.

Every morning she is supplied with food by her mother, but she is not allowed to eat meat or fish. This restriction is not limited to the maiden, for it extends to all women of the tribe during their periodical sickness; and if it is violated it is believed that the men will have bad or ill luck in hunting and fishing.

Another one of their superstitions is that if the girl touches her hair during this period it will stop growing and become coarse. (The tradition says that the hair of the Indian woman was formerly soft and silky, and grew very long.) Her hair is therefore dressed by her mother, who wraps it with buckskin strings, and ties it in two bunches, one behind each ear. For the purpose of dressing her hair

a new comb is used, and this comb is never used by any one afterwards.

She wears a hat conical in shape, much like a dunce cap. This cap is about twelve inches high, with a small hole in the top. It is made of buckskin, supported by thin strips of cedar wood, running at regular intervals from top to bottom on the inside, and is painted red inside and out. Fastened to the cap by a bead string is a piece of bone, shaped like a needle, and through an eye in it the bead string passes. This needle is used for scratching the head, for she is forbidden to touch her hair with her hands. When the needle is not in use it is stuck into the bunch of hair behind the right ear. Her face, neck, and the upper part of her back and chest are also painted red.

When the month has passed she goes to a creek, removes all her clothing, and thoroughly washes. These clothes are taken by her mother to the lodge, where, with the comb and the hat that she had used, they are solemnly burned in a fire that has been kindled especially for that purpose.

An entirely new outfit, which we might call her trousseau, is then provided for her. This she puts on at the creek, and goes at once to the family lodge, where she is again admitted as an inmate, and lays her trousseau aside, to be worn when her husband takes her away. This dress is made of the skin of the gray mountain sheep, the black antelope, or buck skin—the value of the material diminishing in the order named. It is ornamented with shells, elk's teeth, etc. The robe is black elk skin, with the hair on, and has a strip of ornamental Indian work across the middle of the back. They are usually worked with shells or beads, and are highly valued when worked with dyed porcupine quills, which are flattened and polished with the mountain sheep's horn.

From the time of her return to the family lodge, after the first show of her monthly discharge, until she is married—or rather, sold—the maiden does not go out, except just before sunset, for a daily walk. On these occasions, with the exception of her face, she is completely hidden within the folds of a dressed elk-skin that trails the ground, and she

wears red leggins which come high up on the thighs, and red moccasins which are without the usual flaps. In rare cases this practice is continued for two or three years, but ordinarily it is but a short time before a suitable husband is found; for it soon becomes known in the tribe that a woman is in the market, as it were, and all the unmarried braves, far and near, flock to see her, and to negotiate with her parents and relatives for her; and they usually soon conclude a bargain with one of the braves—the girl having nothing to say in the matter. She is paid for in furs, horses, etc., and is taken off.

Customs similar to the ones here related existed generally in the Indian tribes that are scattered over the northern part of our continent, but they all differed more or less in their particulars. In some of the tribes that have but little contact with the white man and with civilization they are still observed.

Schoolcraft mentions* the existence of the "lunar retreat" in some wild tribes. This retreat is erected in some secluded spot, near the family lodge, to which the women retire during their menstrual period. The leading idea of these customs, he goes on to say, is a superstitious dread of contact with any of the tribe. The woman is regarded as being under a spell which has an evil effect on everything that she comes in contact with. Should she cross the path of a warrior or hunter, the influence of all his charms is counteracted and his luck is gone for the day. This evil influence affects as well animals as insects, and by its means a protective spell can be cast over crops, etc. To accomplish this the mother of the family arises on a dark night, when all are asleep, and taking off her clothing drags it after her around the field, and then no insect or destructive animal can enter it.

George Catlin states† that as far as he has observed the Indians, in their primitive state, the custom is universal for each family of a tribe to have a separate lodge for the occupation of the women during their menstrual sickness, and

* Schoolcraft's *Indian Tribes of the United States.*

† *American Indians*, by George Catlin.

that in some cases the non-observance of the custom makes a woman answerable for any misfortune of the tribe or individuals within that period.

Herbert H. Bancroft gives several instances * where the requirements were very severe. In one case the girls, after the first appearance of their monthlies, remained in seclusion for a year; in another, they were confined in a little lodge, that they could not kneel upright in, for six months. In yet another, given by the same author, all that was required was frequent bathing in running water and anointing of their bodies with rotten hemlock and abstinence from eating fish or berries. If this last requirement was not observed, he says, it was thought that the fish would leave the streams and that the berries would fall from the bushes.

J. Owen Dorsey, in the work of J. W. Powell,† of the Smithsonian Institute, in his article on "Catamenia," speaks of the Indian myth on the subject, and then goes on to say that among the Omahas and Ponkas the woman dwells in a small lodge by herself, and, making a small fire, cooks and eats alone for four days. She does not even tell her husband of her sickness; and during this time the children are taught to dread her on account of the odor she is supposed to give forth. Should any one eat with her, they are taken sick. On the fourth day she bathes, washes dishes, etc., and then returns again to the family lodge.

The custom of separation from family or husband during their monthly sickness, as Catlin states, seems to be universal among the women of the numerous Indian tribes, and only differs in their details one from the other.

My article refers especially to the age of puberty and its ceremonies among the "Pond Orielles" or Calispel Indians. The Flat Heads of Montana, Calispels, Spokans, Colvilles, and other tribes of Washington Territory, are all classified as Salish.

The shells that they used as ornaments were considered valuable and passed as money among the Indians of that

**Native Races of the Pacific States*, by Herbert H. Bancroft.

† *Annual Report of the Bureau of Ethnology, 1881–'82*, by J. W. Powell Smithsonian Institute.

section of the country, the value being according to the size of the small conical shell. When the Calispel girl's wedding dress was ornamented with a few shells her husband paid a large price for his bride.

Clinical Reports.

Case of Pernicious Remittent Fever with Serious Complications.* By EUGENE L. CRUTCHFIELD, M. D., Baltimore, Md.

As a rule, pernicious remittent fever is in itself a most dangerous disease. When, however, it occurs in a patient suffering from a whitlow and resulting cellulitis, who is at the same time afflicted with abdominal aneurism, the prognosis becomes doubly grave. Such was the complication of disease found in the patient whose history I will now give.

On the morning of *October* 22nd I was called to see W. A. B., white, aged 26 years. A bone felon on the index finger of the right hand had been lanced at a dispensary two days before. He had been in a malarial district for several months, and presented malarial symptoms of the remittent type. Cellulitis was extending up the fore-arm from the whitlow. Pulse, 102; tongue coated; bowels constipated. I ordered iron, some pills containing quinia, arsenic and opium, and a cathartic composed of mass. hydrargyri, gr. iij; ext. colocynth comp., gr. ij; and ext. hyoscyami, gr. ss. Cold cloths for the cellulitis.

Oct. 23—2 P. M. Temperature, 102.2°; pulse, 100. Cellulitis increasing. Sharp lancinating pain, like that felt in pleuritis, experienced with each act of respiration, but so little information could be obtained from the patient that it was impossible to learn its exact location. Constipation. About 5 P. M. he had a chill, followed by vomiting. At 5:30 P. M., high fever. I operated for the cellulitis, making three incisions. Fever considerably reduced by the loss of blood. Hypodermatic injection of Cognac and morphia. Flaxseed-meal poultice to hand and fore-arm. Rested tolerably well during that night.

Oct. 24—9 A. M. Temperature, 101°; pulse, 90; respiration, 34. Cellulitis diminished. Opened an abscess on the

* Read before the Baltimore Medical Association, Nov. 28, 1887.

finger affected with the whitlow. Lancinating pain increased; hop poultice applied for its relief. Bowels confined. Anorexia. Prescribed stimulants, beef tea, chicken broth, milk, eggs, etc. Rochelle salts. Tinct. ferri. chlor. in half-drachm doses every four hours. Also the following fever mixture:

℞.—Tr. verat. vir..... .....minims, l.
Tr. cinchon. comp..... .....ʒ xij.
Morph. acet .....gr. iss.
Potas. acet.....ʒ ij.
Aquæ.....q. s. u. f..... ℥ iij.
M.—Sig. ʒ j. every three hours.

6 P. M.—Temperature, 103$\frac{2}{5}$; pulse, 100; respirations, 30. Lancinating pain diminished; appetite a little improved; constipation; slight and occasional delirium; vomiting decidedly lessened; cephalalgia lessened; feels a little stronger; sat up for half an hour.

Oct. 25.—9 A. M. Temperature, 102°; pulse, 96; respirations, 29. Lancinating pain greatly lessened; considerable pain in index finger of right hand; incisions granulating nicely; bowels still confined; appetite better; no vomiting; cephalalgia diminished; feels stronger; more talkative. Hypodermic of morphia for pain in finger. Treatment of yesterday continued. An ointment of iodoform ʒ ij to vaseline ℥ j was applied to wounds.

Oct. 26—9 A. M. Temperature, 102$\frac{4}{5}$; pulse, 100; respirations, 24. Bowels confined; lancinating pain diminished; appetite increased; incisions granulating well. Treatment: Senna and manna; same mixture as before.

Oct. 27—9 A. M. Temperature, 102$\frac{1}{5}$; pulse, 100; respirations, 32. Bowels moved once yesterday afternoon; patient irritable; lancinating pain somewhat augmented; no other unfavorable symptoms; incisions healing rapidly. Cold cloths applied to erysipelatous region on dorsum of hand. Same treatment continued. Ordered a pill of blue mass, colocynth and extract of hyoscyamus.

Oct. 28.—Temperature, 101.4; pulse, 100; respirations, 34. Bowels moved once this morning; some appetite, but feels weak; breathing accelerated, but does not seem to be particularly painful; everything progressing favorably; had a rise of fever yesterday and the day before about 5 P. M., therefore ordered quinia, arsenic and opium; otherwise same treatment continued, except that the tincture of iron is to be given in 15-minim doses every two hours instead of half-drachm doses every four hours; tablespoonful of Rochelle salts to be taken at an early hour to-morrow morning.

Oct. 29—9 A. M. Temperature, 102.4; pulse, 105; respirations, 34. Patient weaker; considerable lancinating pain on breathing; no appetite; passed a very bad night; at one time this morning became violent, striking the bedstead and at every one near him; yesterday vomited some of his medicine; rise of fever yesterday about 2 P. M. and again at night; incisions in fore-arm healing nicely; hand progressing tolerably well; discovered a sinus that ought to be opened, but did not use the knife on account of patient's extreme weakness. Treatment the same.

6 P. M.—Temperature, 103.6°; pulse, 116; respirations, 24. Lancinating pain somewhat easier; bowels confined; appetite a little improved. Continued the tincture of iron. Discontinued fever mixture, and in its place ordered the following:

℞.—Quiniæ sulphatis ..... ℈j.
Acid. sulph. arom..... ʒj.
Aquæ, q. s..... ℥iv.
M.—Sig. ℥ss every two hours.

Also, ℞.—Hyd. chlor. mit..... gr. iv.
Res. podophylli.....gr. ¼.
Sodii bicarb .....gr. vj.
M.—Ft. chart. no. j. Sig.—Take at once.

Discontinued hop poultice and mustard plaster that had been used for the relief of the lancinating pain.

Oct. 30—4 P. M. Temperature, 103⅗; pulse, 122; respirations, 27. No action of bowels produced by powder given last night. Tongue coated, especially at the tip and on the sides; indisposition to draw it in again. Slightly delirious at times.

In counting the respirations I always placed my hand upon the patient's abdomen. In this way I detected a violent throbbing, which led me to suspect aortic aneurism. This alone accounted for the lancinating pain so often complained of. I therefore requested Dr. J. W. C. Cuddy to see the case in consultation with me. He confirmed my diagnosis in every particular. Treatment: Tr. ferri chlor., the quinine mixture above mentioned, morphia for pain, stimulants and nourishing diet. Also the following powder:

℞.—Hydrarg. chlor. mit.....gr. vj.
Res. podophylli.....
Aloin .....āā...gr. ¼.
Sodii bicarb..... ..... gr. viij.
M.—Ft. chart. no. j. Sig.—Take at bed time.

Oct. 31—7½ A. M. Temperature, 103°; pulse rapid, small

and weak; respirations, 24. Severe pain on breathing; eyes sunken; rested tolerably well during the night; appetite about the same. Examined abdominal pulsating tumor with stethoscope and discovered a bellows murmur synchronous with the pulse beat; swelling pulsates laterally as well as on its anterior surface. Because of the patient's exhausted condition I did not examine him on his hands and knees to see whether or not the tumor would fall away from the artery. Bowels still unmoved. Continued the iron. Ordered the following:

℞.—Quiniæ sulphatis..... ℈ j.

Ft. capsulæ no. iv. Sig.—Take two at once and the remaining two at 12 M.

2½ P. M.—Hastily summoned. So-called "congestive chill" commenced about 12 M.; impossible to get patient to take the last two capsules; delirium; hands and feet very cold; forehead heated; pulse rapid and weak; respirations of about the same frequency as for several visits past; bowels still unmoved, though patient had several times felt the desire and made the effort to evacuate them. I administered an injection of soap suds and salt. Remained with patient 2¼ hours, giving stimulants and one dose of morphiæ sulphas (gr. $\frac{1}{6}$), and watching the progress of the case. Gradually he commenced to perspire and to doze, the eyelids being only half closed and the balls being drawn partly upwards. Pulse became fuller.

7 P. M.—Found the patient still delirious; hands and feet cold; hot irons had been applied by the family, according to previous instructions. Pulse, 126; respirations, 28; impossible to take temperature. Bowels still unmoved; ordered a suppository of aloes (gr. v) to be introduced at once. Administer stimulants, iron, and the mixture of quinine and aromatic sulphuric acid all through the night; morphia if required; quiniæ sulph. gr. x at 5 A. M.

Nov. 1.—Patient died this morning, at five minutes before 5 o'clock; death from asthenia.

Remarks.—This case, I think, is quite interesting and worthy of consideration, because of the number and the variety of the complications, any one of which is sufficient to destroy life. The malarial element, as I believe, was the direct cause of death.

In this we see two features that were of peculiar interest: 1st. For several days it seemed to be under control, and in

this way it led the family and me to hope for better results than the sequel showed. 2nd. Owing to the complications, it assumed a typhoid type. By this I do not mean that it was a case of remittent plus typhoid fever, but, on the contrary, it was remittent fever with pronounced symptoms of adynamia. So far as I could learn (and I was very careful in investigating this point), there was nothing to lead any one to suspect typhoid fever. There was no tenderness over any part of the abdomen, except in one circumscribed spot in which the pulsating tumor was discernible; there was no tympanites; there was no diarrhœa; the tongue did not present the characteristic appearance of typhoid fever, nor was the temperature chart such as we expect in that disease. I am forced to the conclusion, and Dr. Cuddy agrees with me, that it was remittent fever, with marked adynamic symptoms, the result most probably of the complications.

The whitlow and the resulting cellulitis form another interesting feature. The operations performed for the relief of these were eminently successful, and the process of repair progressed as favorably as could be expected in his exhausted condition. I have no idea that this feature was in any way the cause of death other than by contributing to the general weakness of the patient. In fact, notwithstanding his extreme debility, the incisions were filling with healthy granulations and the swelling and the redness were rapidly subsiding under the influence of constitutional and local treatment. Little or no pain was felt in the hand and fore-arm.

Another serious complication was the abdominal aneurism. That it was an aneurism I am confident, although no post-mortem examination was made. In my mind, the differential diagnosis lay between carcinoma and aneurism. Among the points proving that it was not cancer was the absence of vomiting except such as ordinarily occurs in the history of remittent fever. At no time was any blood detected in the matters vomited. Again, the pain was not augmented by the ingestion of food. Furthermore, the bellows murmur synchronous with the pulse and the expansion of the tumor in every direction, laterally as well as on its anterior surface, tend to support the diagnosis of aneurism.

The age of the patient throws no light upon the subject, as gastric and intestinal carcinoma and aneurism are alike rare under forty years of age.

What could have produced an aneurism it is impossible to say with any degree of certainty. No history of syphilis could be obtained, though the patient was questioned closely on this point. He denied having ever contracted venereal disease, but several times said he had been guilty of self-abuse and imagined that he was the victim of spermatorrhœa. There was no evidence of any heart trouble. In making this statement I rely not only upon my own examination, but also upon one made by my friend Dr. William Dulany Thomas, who administered chloroform when the operation was performed for the relief of the cellulitis. Neither had the patient ever suffered from rheumatism—the most frequent cause of endocarditis.

The day before his death his mother informed me that while residing in the country, in the malarial district to which reference has been made, he, one dark night, walked out on a porch having no railing, and, before he was aware of the fact that he had reached the edge, stepped over and fell. She also said that for some time before consulting a physician he had complained of a pain in the region in which the tumor pulsated (in the median line about the junction of the epigastric and the umbilical region). From what he himself had said, I was misled into thinking that the pain had commenced abruptly on the second day of my attendance.

Did this fall produce the aneurism? It is not impossible. Inasmuch as "Dr. Rendle, of the Queen's Prison, Brixton, has recorded two cases in which abdominal aneurism could be traced to the shock caused by a sentence of transportation," * it is not at all improbable that the aneurism in my patient had its starting-point in the shock produced by the fall.

While in the country he was afflicted with internal, bleeding hæmorrhoids. May not these have been the result of pressure made by the aneurism causing a retardation of the

* Bryant's *Practice of Surgery.*

circulation in the hæmorrhoidal veins? Again, it seems highly probable that the tumor, compressing the intestine and thus effecting mechanical obstruction, was the cause of the obstinate constipation observed during his last illness. In fact, there had been a history of constipation existing in a greater or less degree for about a year. Notwithstanding the administration of large doses of calomel, blue mass, aloin, resin podophyllin, etc., it was impossible to obtain an operation from the bowels for several days before his death. At times he had the inclination and made the effort to evacuate them, but all such attempts were ineffectual. This clearly proves that the cathartics did increase the peristaltic action of the intestines, but the obstruction prevented the contents from passing beyond that point.

Altogether this was a most seriously complicated case—one in which no physician could hope to effect a cure, or even to prolong life for any considerable period. A fatal termination was inevitable, death no doubt being a relief to the unhappy sufferer.

Case of Cerebral Meningitis, with Purulent Effusion. By WM. J. CRITTENDEN, M. D., Unionville, Va.

On *April* 27th, 1887, I was called to see the twin male infant of Mr. John W.——, aged 9 months. His mother told me that during the previous night he had had seven or eight operations from the bowels, all of which were thin and watery. I examined his gums and found the central incisors of both the superior and inferior maxilla were nearly through, and that his gums were hard and tender. I lanced his gums freely and gave him:

℞. Bismuth. subnit..... ..... ʒii ss.
Dover's powders ..... grs. xv

M. Divide in 15 powders.

Sig.—Give one powder every 3 hours, until bowels are checked.

April 29th. I found his bowels checked, not having had an operation since the previous day. The child was very fretful, pupils irregular, left pupil contracted, right normal

or slightly dilated; eye-lids drawn across the eyes; photophobia; pulse, quick and irregular; extremities cool, and head hot; bowels contracted—vomiting.

Diagnosis—Cerebral meningitis.

Treatment.—℞. Potassium iodide.....ʒss
Fld. ext. ergot.....ʒiss
Peppermint water..... .....℥ij
Distilled water.....q. s. ℥iv

M. S.—One teaspoonful every 4 hours during the day.

Aler.—℞. Potassii bromidi.....ʒiij
Chloral. hydratis.....ʒi
Aqua destillat.....ʒiv

M. Sig.—One teaspoonful every hour until quiet and sleep are produced.

April 30th. Symptoms same, continued same line of treatment. The child continued to roll his head from side to side, putting his fingers, first in his eyes and then in his ears, in a boring manner. I dropped a few drops of cocaine solution in his ear with some relief. This train of symptoms continued for 4 or 5 days. Pulse grew more feeble; but there was not so much restlessness; there was vomiting and constipation, and pupils at the end of this time were dilated. He was constantly boring in his ears with his fingers. I accordingly introduced a small aural speculum and found the membrana tympani hard and tense, the convexity looking externally. I introduced an aspirating needle and drew fully an ounce of pus. I then washed it out with a 11:5000 warm solution of corrosive sublimate This was continued for 10 days, at the end of which time I saw no running of pus from the ear at all, and discontinued it. I gave him bromide sodium to allay nervousness, iodide of potassium and Warberg's tincture as a tonic—10 drop doses. Fld. ext. cascara sagrada at bed time to regulate his bowels. Having continued this line of medication for 10 days, I found much improvement, bowels regular, appetite good, slept well at night. I now gave him cod liver oil, syrup of lactophosphate of lime and minute doses of Fowler's solution, with the most nutritious food that could be given him. The child made a rapid recovery and is now well, its improvement dating from the aspiration.

In this case, I think, I had cerebral meningitis (?) with purulent effusion, the effusion passing along the sheath of the 7th nerve. I believe the life of this child was due primarily to the aspiration I did.

Correspondence.

Ether or Chloroform in Surgery?

Mr. Editor,—In my answer, in the December number of your journal, to Dr. McGuire's criticism of the conclusion I had arrived at in my work on surgery as to the greater safety of ether over chloroform, I tried to show that, aside from personal experience, my statements were based on figures given in the recognized literature of surgery and accepted as facts by a part of the profession.

It is evident that Dr. McGuire justifies their employment, for in his reply, in the January number of the journal, he quotes from the same works in defence of his own position. Since from the standpoint of personal observation we interpret the figures differently, I wish to give to your readers my reasons for preferring ether in general surgery, and to give at the same time the opinions on this most important subject of my co-workers in this great city of hospitals, in which annually are treated a quarter of a million patients.

So far from being prejudiced in favor of ether, my personal preference is for chloroform. My preceptor, a Confederate army surgeon, used nothing but chloroform in his practice; and at the University of Louisville, where I was graduated, this agent was employed to the exclusion of ether.

My faith in chloroform was shaken first by witnessing the death of a young lady, about sixteen years of age, who was being operated on for caries of the tarsus. The agent was in experienced hands, and the death by heart failure ensued within the first few minutes of the operation. This incident led me to inquire into the comparative safety of these two agents, and I was not long in finding out that the number of deaths reported from chloroform narcosis far exceeded those from ether. When I came to New York city, fifteen years ago, I was attracted by the fact that ether was employed in surgical operations almost without exception chiefly by those surgeons of large experience and world-wide renown. As a result of study and observation I was compelled to believe that ether in general offered greater

safety to my patients, and only in exceptional instances can I justify myself in the employment of chloroform. I have never witnessed a death in ether narcosis, and only twice have alarming symptoms supervened. In both instances the threatened asphyxia yielded readily to artificial respiration. At Mt. Sinai Hospital, one of the largest operative hospitals in New York city, where ether is almost exclusively employed, no death has occurred in ether narcosis during my seven years' service, nor am I able to find any record of such accident in the history of this institution. At another large hospital, where chloroform is extensively used, one death from this agent occurred a year ago, being the second fatal result in the same year in the practice of its staff.

The danger of chloroform is that it attacks the heart, leaving us practically helpless; for there is as yet no known and ready method of carrying on the circulation until the effects of the poison wear off.

On the other hand, when in ether narcosis death is threatened, it is by asphyxia—the heart going on with its work after respiration ceases. It is accepted that in artificial respiration, promptly and carefully employed, we have a ready and efficient method of keeping up the supply of oxygen until the effects of the ether disappear.

Prof. H. C. Wood, in his splendid work on "*Therapeutics, Materia Medica and Toxicology*," says: "The very careful experiments of the English Chloroform Committee (*Med. Chirurg. Trans.*, Vol. XLVIII, p. 326) proved that after the first half minute of the inhalation of chloroform there is a progressive lowering of the arterial pressure." "On the heart itself chloroform undoubtedly exerts a steady, powerful, depressing influence." "When death is produced by chloroform in man, it is generally by cardiac paralysis, due to a direct action upon the heart-muscle, rarely by asphyxia."

Prof. Bartholow says: "The danger from the inhalation of chloroform is vastly greater than that from ether."

According to Prof. Wood: "The pulse is quickened and increased in force by ether, and it will often maintain itself during a prolonged narcosis." "If the inhalation of ether be sufficiently prolonged, the sensory and finally the motor functions of the medulla are compromised, and death by a paralysis of the respiratory centres ensues." "When death is

produced by ether, the heart generally continues to pulsate for a long time after the arrest of respiration." "The reason of the safety of ether is that, unlike chloroform, it never suddenly paralyzes the heart."

Against the employment of ether it is argued that bronchitis and pneumonia are more apt to follow than from the inhalation of chloroform. No one denies that ether is more irritating to the respiratory apparatus than chloroform, not only on account of its chemical composition, but also from the greater quantity required. However, a fatal pneumonia after ether is of rare occurrence, and in my opinion when it does occur it is as apt to be caused by the long and often unnecessary exposure of the patient to extreme variations in temperature, and not infrequently to flooding the body with liquids used in irrigation, as by the anæsthetic.

Personally I have lost two patients from pneumonia after ether narcosis. One proved to be from pyæmic infarction; the other developed, five days after the operation, from a pleurisy caused by deligation of the vertebral artery low down. Neither case could be referred to the effects of the anæsthetic.

Probably the most formidable contra-indication to prolonged narcosis from ether is nephritis—a condition which adds gravity even to a minor operation, no matter which one of these agents is employed. I am inclined to believe that in this class of patients chloroform will prove less injurious to the kidneys than ether, but as yet the demonstration is not complete.

I coincide with Dr. McGuire in the opinion that this important question can only be settled by "the combined experience of many observers." To this end I have written to the surgeons of the large New York hospitals with the request that they permit me to publish their views. The questions asked were—(1.) Do you consider ether safer than chloroform in surgical operations? (2.) In what cases do you prefer chloroform?

All of the answers received are here given.

Dr. Robert F. Weir (New York Hospital, Professor of Clinical Surgery, College of Physicians and Surgeons):

"I decidedly consider ether a safer anæsthetic than chloroform, though I think it more dangerous than generally supposed (1 death in about 2,000 cases). I only use chloroform when ether cannot be obtained, or in the *very, very* rare instances where etherization when attempted has failed."

Dr. W. M. Polk (Bellevue Hospital, Professor of Gynæcology University Medical College):

"Ether administered by the Clover method is safer than chloroform. In labor, however, I prefer chloroform, as then, owing to the exceptional conditions present, this drug is as safe as ether, and is more easily handled."

Dr. T. Gaillard Thomas (Woman's Hospital, Professor of Gynæcology, College Physicians and Surgeons):

"I use ether in preference to chloroform as a very general rule. I prefer chloroform to ether in patients with albuminuria; in those cxtremely exhausted from any cause; in certain rare cases in which ether induces intense nervous excitement and great muscular effort. I always prefer chloroform in midwifery. With our present light upon the subject, I should say, for very short operations, nitrous oxide gas; for midwifery, chloroform; for general surgery, ether."

Dr. Thomas Addis Emmet (Woman's Hospital):

"I have used ether some twenty-five years, and I have found its use is attended with the least danger in my surgical work."

Dr. Charles Carroll Lee (Woman's Hospital, Professor of Gynæcology, New York Post-Graduate School):

"I consider ether safer than chloroform in surgical operations, and I employ the latter in none except obstetrical cases."

Dr. Robert Abbe (Surgeon St. Luke's Hospital, Professor of Clinical Surgery, New York Post-Graduate School):

"My feeling of absolute security in using ether is due to having resorted to it from two to three thousand times at least, in the past fourteen years, without a death from it. I have not used chloroform more than ten times, except in obstetric cases. I fear the cardiac syncope of chloroform, seldom as it occurs, more than the very occasional renal congestion that may follow prolonged ether narcosis."

Dr. F. S. Dennis (Bellevue and St. Vincent's Hospitals, Professor of Surgery, Bellevue Medical College):

"I prefer ether in the majority of cases, not because it is the anæsthetic most easily administered, but because I believe it to be the safest for general use. Chloroform I use in cases of Bright's disease, and other kidney affections; also occasionally in very young people. I have employed the A. C. E. mixture in cases of kidney trouble, and have been much pleased with it. Ether is, without doubt, the safest."

Dr. Joseph D. Bryant (Bellevue Hospital, Professor of Anatomy and Clinical Surgery, Bellevue Hospital Medical College):

"Experience forces me to conclude that ether is safer in surgical practice than chloroform. In children, especially in operations about the face and throat, I prefer chloroform. I also prefer chloroform in chronic diseases of the brain, its membranes, or vessels; in chronic diseases of the lungs or kidneys, or heart; when for special reasons vomiting is contra-indicated; and when patients refuse to take ether."

Dr. T. W. Wright (Bellevue Hospital, Professor of Surgery, University Medical College):

"I use ether in preference to chloroform as a general anæsthetic. I consider ether somewhat safer than chloroform in prolonged surgical operations. I frequently use chloroform with children and young healthy adults; and when formerly engaged in obstetric practice, used it extensively."

Dr. W. T. Bull (New York Hospital, Professor of Clinical Surgery, College of Physicians and Surgeons):

"I consider ether, carefully administered, in all cases safer than chloroform. I have no experience with chloroform."

Dr. Lewis A. Stimson (Bellevue and Presbyterian Hospitals, Professor of Clinical Surgery, University Medical College):

"I deem ether a safer general anæsthetic than chloroform. During the last seven or eight years I have used chloroform only twice, and then in operations upon the mouth or trachea, in which I desired to avoid the free secretion from the bronchial mucosa, which is usually excited by ether."

Dr. T. M. Markoe (New York Hospital, Professor of Surgery, College Physicians and Surgeons):

"I consider ether the safer anæsthetic for general use. I use chloroform in children; in parturition, and in cases of fatty or specially weak heart, from any cause. I also prefer

chloroform when any considerable disease of lung tissue has much reduced respiratory capacity."

Dr. F. H. Lange (German Hospital):

"In my opinion, the question of the greater safety of ether over chloroform cannot be answered until we are in possession of reliable statistics concerning the secondary dangers of ether narcosis. Unless we know in what percentage of cases pulmonary and nephritic complications may arise, or existing ones get worse, we can have no safe judgment of the danger of ether. I am under the general impression that so far the remoter accidents due to ether have been underrated. In cases of pulmonary and nephritic trouble, I regard chloroform, if properly administered, as the less dangerous anæsthetic. This has, of course, nothing to do with the preference I have for chloroform narcosis in general, so far as its agreeableness during the operation, and to the patient himself, is concerned."

Dr. A. G. Gerster (Mt. Lenoir and German Hospitals, Professor of Surgery, New York Polyclinic):

"On the whole, I consider ether a safer agent for inducing general anæsthesia than chloroform. Acute and chronic affections of the kidneys, and chronic affections of the lungs, especially in elderly subjects, constitute important exceptions to this rule. In these cases chloroform deserves preference under all circumstances."

Dr. L. Bolton Bangs (St. Luke's Hospital):

"I consider ether safer than chloroform in surgical practice. I employ chloroform in no cases."

Dr. D. M. Stimson (Mt. Sinai Hospital):

"I consider ether much safer than chloroform in surgical operations. I prefer chloroform in very young children; in parturient women; and where it is a cardinal point that there be no vomiting following the anæsthesia."

Dr. Charles R. Briddon (Presbyterian Hospital):

"Of late years I have used ether almost always; I will not say from preference, but rather in obedience to professional opinion. Yet I have seen some narrow escapes from death during its administration, both from asphyxia and cardiac failure. I think chloroform is the better agent in children, and in adults suffering from heart and lung complications; and I believe that ether, when the narcosis is prolonged, is the frequent cause of renal insufficiency that follows operations of magnitude."

Dr. Charles McBurney (St. Luke's and Presbyterian Hospitals):

"I consider ether as the safer of the two anæsthetics. I use chloroform in cases where I desire very rapid and temporary anæsthesia (as in making a single incision); in cases where there exists a very great aversion to ether; and in cases where, by previous experience with the same patient, I have found that ether has produced some disagreeable result."

Dr. W. F. Fluhrer (Mt. Sinai and Bellevue Hospitals):

"I consider ether in surgical operations safer than chloroform, so far as concerns immediate danger to life, but more often than chloroform to bring about morbid visceral changes which, in their remote effects, place life in peril. I prefer chloroform in children. In all other cases, by using ether, I accept the greater chances of remote dangers with the thought that they can be more successfully treated than the immediate ones that sometimes attend the use of chloroform."

Dr. Frank Hartley (Bellevue and Roosevelt Hospitals):

"I prefer ether in all cases, except where a complete muscular relaxation is desired, or where a marked chronic nephritis is present."

The burden of this testimony is distinctly in favor of of ether as the safer agent in inducing general narcosis in surgical operations.

If this controversy shall attract the attention of your readers, and create a greater interest in the subject of the proper selection of an anæsthetic, it will not have been altogether fruitless.

The whole question is, in general, overlooked. Text-books are not sufficiently explicit; in the colleges *a single lecture* on anæsthesia is considered enough. Too often in private practice, as in hospital work, a tyro is entrusted with this most important function.

I am not Utopian enough to expect an anæsthetic so perfect that from its administration danger may be eliminated. Both ether and chloroform are fraught with danger, which should ever demand the greatest care and watchfulness in their administration. My argument is, that in surgical operations the dangers from ether, whether immediate or re-

mote, are so much less than those from chloroform, that the latter should only be employed in exceptional cases.

JOHN A. WYETH, M. D.

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Original Translations

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Sarcoma of the Rectum.

The sarcomatous diathesis, says Grenet, (Thése de Paris, 1887—*Bulletin de Therap.*,) may manifest itself in the rectum. The localization is rare. Cases do, however, occur, and may be primitive or secondary. When *primitive*, the sarcoma may diffuse itself over a large extent of the intestine, and produce a true circular contraction, which may be confounded with syphilitic contraction, or malignant stricture, etc. At other times it appears in the form of a limited tumor, which it is important not to confound with the tumors usually found in this locality (epithelioma, polypi, etc.). When the sarcoma is *secondary*—that is to say, it has attacked other organs before appearing at this point—it manifests itself in one of three forms: it may be diffused, it may occur as a very limited tumor, or it may be disseminated in the form of plaques or nodules scattered upon the rectum. These three varieties give rise to some very different clinical pictures, and errors of diagnosis often result. Sarcoma of the rectum is a very serious disease, especially when it is secondary. Here the general diathesis rather than the local disease tells the prognosis. The primitive sarcoma, the form which has the greatest tendency to diffuse, is the most dangerous.

Intestinal occlusion, which is most frequently observed in the diffuse form, is the most serious symptom and the one which diminishes the chances of life. Histological examination is very important in the diagnosis of doubtful cases. The treatment is extirpation, if the sarcoma is localized and in the form of a tumor; if the other forms, with the exception of the disseminated, exist, lumbar colotomy will be required. Any surgical treatment is useless in the disseminated form. Here only medical treatment should be instituted, and this gives little hope of improvement, since sarcomatous nodules are always in these cases to be found in other parts of the organism.—*Le Practicien*, Dec. 19, 1887.

Proceedings of Societies, Boards, etc.

RICHMOND MEDICAL AND SURGICAL SOCIETY.

During the meeting of this Society held February 9th, 1888, the greater portion of the time was taken up in a running discussion of the paper read by Mr. Hugh Blair, on *Clinical Examinations of Urine*, which paper we publish in full in this issue. The discussion was mostly regarding matters relating to bacteriæ, micro-organisms, etc., and was mostly of a speculative character, indulged in by several of the members present.

Under call for "Exhibition of Pathological Specimens, etc.," Dr. Lewis C. Bosher exhibited a *specimen of stone*, weighing 3 ounces 7 drams, removed, after death, from the bladder of a white man who had died of interstitial nephritis. A section of the stone was examined by Mr. Hugh Blair, who pronounced its composition to be phosphates with a nucleus of mucus.

He also exhibited a *specimen of proliferation of bone.* The patient was a white boy, about 18 years of age, whose left arm had been amputated for an injury received from a fall while skating. Some time after the wound had healed, the humerus protruded through the flaps, and continued to grow until it had attained a length of three inches, when the arm was amputated a second time by the late Dr. Frank D. Cunningham. There has been no return of the pathological condition.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Semi-Annual Conversational Meeting.—The President, F. P. Henry, M. D., in the chair; W. E. Hughes, M. D., Recorder. (Abstract of the Address delivered by W. T. Councilman, M. D.)

Some Further Investigations on the Malarial Germ of Lavaran.

This organism, first described by Lavaran, has been met with in every case of malarial fever which the writer has met with. The organism is in high degree polymorphous, and ten tolerably distinct forms may be found in the blood. Some of these evidently represent different stages of development, and the connection between them is obvious. Others present such marked differences in form that no connection between them can be made out. Some of the forms are only found outside of the red corpuscles, and others are

found free in the blood. The forms described are (1), non-pigmented small amœba-like bodies inside the red corpuscles; (2), pigmented bodies larger than No. 1, also in red corpuscles; (3), pigmented bodies about the size of red corpuscles; (4), segmenting forms of the No. 3 body; (5), small hyaline bodies, which are formed by this segmentation; (6), a crescent-shaped body with pigment in the centre, the horns of the crescent being often connected by a fine line; (7), round or oval bodies, which differ from No. 6 in shape only; (8), a pigmented body, provided with numerous, long, actively-moving flagellæ; (9), actively moving free flagellæ, which are evidently derived from No. 8; (10), a pigmented body with an active undulatory movement of its periphery. The first five forms are found only in intermittent fever, No. 4 only being seen in the blood during the chill period, and its presence is invariably connected with the chill. Nos. 6–7 are found in cases of malarial cachexia. The most interesting forms, and about whose parasitic nature there can be no doubt, are the bodies Nos. 8 and 9. These are generally absent in blood taken from the finger, but they may be found in any type of the disease. They were found, however, in 15 out of the 20 cases in which the blood of the spleen was examined. Of these 20 cases, 12 were cases of malarial cachexia and 8 of intermittent fever. In the 12 they were found 10 times and in the 8 cases of intermittent 5 times.

From this it seems probable that Lavaran was right in considering the flagellate organism the most important form of the parasite. The influence of quinine on the intra-corpuscular forms of the parasite is most marked. Doses of 15 grs. *ter in die* for two days in succession were found sufficient to cause them to disappear. The effects of the quinine were not so apparent in the other forms The crescents were apparently not diminished in number in one individual after he had taken 48 grs. of quinine daily for 7 days, and 60 grs. daily for 4 days.

Dr. Wm. Osler said the thought which had struck him most forcibly in looking over this subject was the almost perfect unanimity which has prevailed among the different observers as to the appearance of these organisms. With the sole exception of the sigmented form (No. 4), Lavaran and the early observers had described them all. His own observations, since the communication he had presented to the Society last year, had been somewhat limited. He had, however, made a series of observations upon the blood of fishes and birds, since it had been stated that bodies resem-

bling Nos. 1, 2 and 3 had been found in the blood of carp and some water-fowl. Prof. Baird had offered him facilities for this work at Wood's Hall and had kindly furnished him with 45 carp. He had failed to detect any such organisms in the blood of these. In the blood of a goose sent him from Ontario he had found one or two pigmented bodies. It had been stated by Dr. M. Callum, who sent him the goose, that the bird had malaria. However, the bodies were not numerous, nor was the temperature of the goose elevated, nor so far as he could make out, had it chills.

Dr. Councilman had not figured one body which is very peculiar indeed, namely a solid body in the centre of a clear space. It stains like a micro-organism, varies in size, and although the body itself does not change in form, yet there are sometimes changes in outline in the clear space surrounding it—they were somewhat abundant in one case only. One other point with regard to the clear bodies (No. 1), in five or six instances he had seen such bodies pass out from the corpuscle, remaining out and undergoing no further change of form. He was not altogether prepared to say what was the relationship of these bodies to the other bodies described. It has been claimed that similar changes can be obtained by special methods of heating the blood. The most important question is first to determine the relationship of the hyaline to the pigmented bodies and the possibility that the hyaline may not be directly associated with them. He was convinced that the pigmented and sigmented bodies were merely different stages. He could fully confirm what Dr. Councilman said with regard to the crescents. They are most peculiar and interesting bodies, occurring in the chronic cases and in those in which there had been no chills. Three weeks ago he had lessoned on a case as one of typhoid fever; it had lasted eight or ten days with constant fever, up in the evening, down in the morning, slight enlargement of the spleen, no spots. His resident examined the blood and found what he thought were crescents. The case got rapidly better, left the hospital, and returned in a few days with a distinct chill, with crescents in the blood and a well marked remittent fever. The motile forms he had not seen nearly so frequently as Dr. Councilman; though he had not examined the blood from the spleen they had been present in eight or ten cases. Nor had he seen free filaments nearly so often; when he wrote his paper he had not seen them at all. Since then he had watched the process of separation. It was out of the qnestion to suppose that the crescents or motile forms could

come from degenerations in the stroma of the corpuscles, but that the hyaline forms resulted from such changes was not altogether improbable, and further investigations were necessary to determine this point.

Dr. J. P. C. Griffith called attention to the diagnostic value of these organisms, and instanced a case, where from the indefinite history and symptoms, he was unable to make a diagnosis until after an examination of the blood, when a short course of treatment resulted in a cure.

Dr. H. C. Wood said that no one seemed to have made any connection between the crescents and the amœboid forms. They seem to differ in that these are destroyed by quinine; those are not affected. We know that malarial cachexia is cured by quinine, arsenic, and iron. If these remedies have no effect on the crescents what connection have these bodies with malaria, and what becomes of them; do they eventually disappear?

Dr. Formad asked whether these organisms are the same as those bodies described by Hütter some 20 years ago?

Dr. Councilman said, in concluding, that Hütter described moving bodies attacking the red corpuscles, existing in all forms and apparently almost everywhere else. These observations had never been confirmed. The point raised by Dr. Wood had always puzzled him and for a long time he had tried to reconcile himself to a belief in two distinct diseases, but this he could not do; as always, as the other forms disappear the crescents appear. He had never seen the crescents with a history of previous chills. He was not altogether prepared to say that quinine had no effect on the crescents, though in several cases he had given it in large doses with no results. Still, in some cases they do seem to disappear. He thought with Dr. Osler that the crescents could not be possibly produced by changes in the stroma of the corpuscles, though some of the other forms might.

"Have used TONGALINE for sciatica with the most happy effects, relieving the pain and restlessness, and curing the case with very little of the medicine. In a case of rheumatism of the neck and shoulders of a neuralgic character, its action was everything I could have desired. In future I shall use Tongaline more freely, being convinced of the great value of the preparation."—BEN. H. BRODNAX, M. D., Brodnax, Morehouse Parish, La.

Analyses, Selections, etc.

Antiseptic Midwifery in the Charity Hospital, New Orleans.

This valuable report is made by Mr. George H. Lee, resident student, (*N. O. Medical and Surgery Journal*, Jan., 1888). The writer refers to the firm hold which puerperal septicæmia had upon the obstetrical wards of the hospital, and to the necessity for adopting some means of prevention. The systems of Drs. H. J. Garrigues, of New York, W. L. Richardson, of Boston, and B. C. Hirst, of Philadelphia, are mentioned. Dr. Hirst's article did not appear until two months after the Charity Hospital system had been put into operation. The systems of the three physicians mentioned, and the statistics, are given, and the following report from the Charity Hospital:

Hygienic Arrangements.—The lying-in wards for white women consist of one large ward with fourteen beds, and six rooms separated from the large ward by a hallway and gallery, two beds in each room. There are 1275 cubic feet of space to each bed. Ventilation good. The large ward never full. Space to each patient (1000 cubic feet to each bed) about equals that in the rooms. There being five cases of fever in the large ward (July 1st, 1887), the bedding in the little rooms was changed, and furniture and floor scrubbed with a $\frac{1}{2000}$ sublimate solution. The walls were scraped, washed with the same solution, and while damp fumigated for twenty-four hours with burning sulphur. The rooms were aired for several days and then occupied by the patients awaiting confinement. They were attended there by a seperate physician, student, and nurse. No others were admitted. After the septic cases in the large ward recovered, they were transferred to the general medical wards, and the apartment thoroughly cleaned and disinfected by previously used means. It is now occupied by those awaiting delivery and those convalescing. The small rooms are used in rotation to confine the patients. About the thirteenth day after labor the women are moved into the large ward. As each small room is emptied, it is disinfected. When a suspicious case occurs in any quarter, it is isolated.

Management of a Case.—Two solutions (A. one of bichloride, $\frac{1}{2000}$, and the other (B) of carbolic acid, $\frac{1}{40}$) are kept on hand. In private cases a stronger solution may be kept for convenience, and diluted when used. All metallic instru-

ments are left for twenty or thirty minutes in B, before use. Rubber catheters, syringes, and non-metallic instruments are put into A. A pad is prepared by quilting together two pieces of domestic, a yard square, with a layer of batting between. This is boiled, soaked in A. and dried. The hands of the attendant are scrubbed with a nail brush, first in soap and water, then in A. Before each examination the vulva is washed off with A., and the hands dipped into the same solution for a few minutes; a basin of A. containing charpie, being at the bed. The mattress is covered by an oil cloth; on this a clean sheet; on this an oil cloth 6x4 feet; and on this the pad under the buttocks. At the beginning of labor an enema and a bath are given, the vulva being washed off with A before examinations. These are made only when necessary, and only by the one in charge of the confinement. As a lubricant $\frac{1}{2000}$ solution of bichloride in glycerine is used when demanded. When the presenting part distends the perineum, advancing and retracting with each pain, this part and the genitalia is occasionally bathed in A. The placenta is delivered by Crédé's method of expression, and ergot given only after its expulsion. By expelling clots and contracting uterine fibre this proves antiseptic. Lacerations of the perineum are washed with A., and sutured with carbolized catgut. The parts are again wiped, and lint wet with A. laid over the vulva. The soiled pad and upper oil cloth are removed with other soiled cloths, and replaced by clean ones. This pad is changed three or four times daily, and oftener if necessary. Each time the nurse disinfects her hands, and wipes off the genitalia with a clean cloth and A. No vaginal injection is used unless called for by some local condition, or unless the hand has been inserted. Then, a $\frac{1}{4000}$ hot bichloride solution is used, only by the physician. Uterine injections are given when the hand has had to enter the organ, when the fœtus is macerated, or the placenta decomposed. For this purpose a $\frac{1}{4000}$ hot bichloride solution is used through a Bozeman's double current uterine catheter, followed by a $2\frac{1}{2}$ per cent. carbolic acid solution to wash away remaining bichloride. These remarks apply to uterine and vaginal injections used as preventive measures during or immediately after labor. During the puerperium they are never used except when symptoms of sepsis set in, and then only by the medical attendant.

"The result is far less anxiety for the medical attendant, very much less trouble for the nurse, wonderfully less

morbidity, and no mortality in the puerperæ." Then follow tables and two illustrative cases are given:"

Popular Medical Superstitions.

An address read before the New Orleans Medical and Surgical Association by the Retiring President, Henry Dickson Bruno, M. D. The writer treats his subject in an interesting and instructive manner, referring to the present as well as the past dark beliefs of medicine.

A Portable Operating Table.

Dr. Edward 8ouchon, of New Orleans, (*N. O. Medical and Surgical Journal,* Jan. 1888) describes his invention, which will be found a great convenience for the surgeon.

Reminiscences of Distinguished Physicians, Etc.

The annual oration, delivered by Hon. Chas. Gayarre, of New Orleans, before the N. O. Medical and Surgical Association, Dec. 3rd, 1887, (*N. O. Med. and Surg. Jour.*, Jan. 1888), gives a pleasing reminiscence of various distinguished physicians and surgeons both in this country and abroad, with whom the speaker was intimately acquainted.

Renal Abscess—Nephrotomy—Recovery.

Dr. Arch Dixon, of Henderson, Ky., says (*South. Med. Rec.*, Jan. 1888), a fisherman, Oct. 18, for two weeks had been much exposed to the sun, and was continually wet from hauling a seine, had a chill, with daily fever, and evening rises not yielding to quinine. Diarrhœa was followed by constipation. He was somewhat emaciated; tongue dry, with brownish coating; slight sordes on teeth, and foul breath; abdomen tender and slightly tympanitic; tenderness marked over the cœcal region; temp., morning, 103°; pulse 110; anorexia; disposition to sleep, and sweats; no tumor, nor pain since the day following the attack. On that day there was soreness of all the muscles—with sharp pain in the back. He was treated for typhoid fever. After ten days he felt something growing in his right side, and palpation revealed a tumor, the size of an orange, deep in the renal region; no fluctuation. Some days previous there had been slight rigors, but now the examination was succeeded by a rigor so severe as to require a hypodermic of morphia and atropia. The urine had been cloudy and thick for several days. Pus corpuscles and casts were found. The following day an exploring needle withdrew some pus. An oblique

lumbar incision was made. Six ounces of pus were obtained. A drainage tube was used, and after thorough disinfection, the wound was closed by deep and superficial sutures. In two months a small fistulous opening which remained had closed. The writer quotes from Greig Smith with regard to the indications for nephrotomy.

Man an Object of Zoology.

This article is continued by Dr. S W. Stiles, of Georgia, (*South. Med. Rec.*, Jan. 1888).

The Prohibition Question from a Medico-Legal Standpoint.

The aim of Dr. C. C. Fite, of Knoxville, Tenn., (*South. Prac.*, Jan., 1888), is to show the wide-spread evils of intemperance, and to emphasize the fact that prompt measures must be taken to protect those who suffer directly and indirectly from drunkenness.

Placenta Prævia.

Dr. William D. Haggard, of Nashville, Tenn., (*South. Prac.*, Jan., 1888), after referring to several authorities, deprecates too much haste in bringing about delivery. If summoned to a case of accidental or unavoidable hemorrhage prior to the seventh month, or before the viability of the child, try to tide the woman over, if the prospects for success are good. Anodynes, rest on a hard bed, cold acidulated drinks, and quiet, are to be used. If more decided measures have to be used, dilatation of the cervix and uterine contraction must be effected. Plugging the cervix with laminaria tents will open the cervix and partly arrest hemorrhage. Tamponning the cervix and vagina with silk handkerchiefs, etc., requires watching. Should the cervix be dilated, and the hemorrhage not too profuse, nature may be trusted still further; but if spontaneous labor does not come on, and life is in jeopardy, the membranes must be punctured; and to aid dilatation, Barnes's hydrostatic dilators may be used. If labor is still delayed and bleeding continues, resort to podalic version by the bi-polar method. This measure failing, delivery must be effected at all hazards by gentle extraction of the breech and trunk, with subsequent rapid delivery of the head.

Monstrosity.

Dr. A. G. Castleman, of Chattanooga, Tenn., (*South. Prac.*, Jan., 1888), thus describes a female infant delivered by him:

"The bowels, liver, spleen, and stomach were developed on the external surface of the abdominal wall, and lay on the left side of the linea alba, enveloped by a membrane which resembled a mucous membrane, and was continuous with the integument of the abdomen; the viscera were finally attached to the external surface of the abdomen and to the border of the membrane which enclosed it. The funis was small, and about two and one-half inches in length, and surrounded by a loose coat which I ruptured before it could be ligated. Hips and legs were badly deformed, and right foot was turned inwards and upwards. Strange to say, the fœtus was alive, opened its eyes several times, and expired within about ten minutes. As regards the labor, the placenta was attached, the adhesions were severed by passing the finger around between the uterus and placenta. But little hemorrhage followed, and the mother is doing well at this time."

Osteitis and Periosteitis.

Dr. T. J. Hoppel, of Trenton, Tenn., says (*Miss. Val. Med. Month.*, Jan., 1888), the predisposing causes of these affections are scrofula, syphilis, rheumatism, and defective nutrition; the exciting causes are traumatism and cold. Except in whitlow the strumous diathesis has been present in almost every case treated by the writer. The initial symptoms vary a great deal in their prominence. They may resemble typhoid fever or rheumatism, but sooner or later the recorded signs are noticed. The prognosis is good, so far as recovery with a useful limb is concerned, provided the case be treated early. Any well marked cachexia lessens the chances for success in treatment. This disease must be distinguished from rheumatism, myalgia, simple neuralgia, and typhoid fever. Methods in treatment are to determine as soon as possible the presence of pus and remove it. Free incisions, drainage, and antiseptic washes must be used. In some cases a strong tonic and nourishing treatment will limit the disease. If it is an acute type, constitutional measures must be employed first, afterwards the operation. It is highly important to recognize the disease at the start, and also the liability to septicæmia. The writer cites some cases illustrating his views and the successful results of his treatment.

Pilocarpin in Acute Alcoholism.

Dr. E. A. Neely, of Memphis, Tenn., (*Miss. Val. Med. Month.*, Jan , 1888), refers to the value of pilocarpin in the disease mentioned. Its value was first noticed by his treating a

supposed case of insolation with the drug. It is in cases marked by more or less nervous manifestations that the good effects are most clearly seen, and the drug ought to be used before the stage of depression has occurred in which it is contraindicated. The writer administers pilocarpin hypodermically, giving it in doses of from one-fifth of a grain to half a grain, and stating that the full physiological effects must be obtained. He concludes, "(1.) That in pilocarpin we possess an agent of great value in acute alcoholism. (2). That because of its motor depressant and paralyzant effects we can act promptly and decisively. (3). With it we can shorten the duration of an attack, and establish convalescence much more quickly than with any other remedy at our command. (4). That we can always rely upon it. (5). That its minuteness of dose renders its administration an easy act. (6). When judiciously employed it is perfectly safe." The use of pilocarpin at first, it is claimed, also prepares the way for other courses of treatment.

Genito-Urinary Surgical Clinic, Oct., 1887.

By Dr. W. B. Rogers; Reported by H. C. Rogers, and M. H. DePass, Clinical Assistants at Memphis Hospital Medical College, (*Miss. Val. Med. Month*, Jan., 1888).

I. *Stricture of Urethra.*—No renal trouble. Two strictures present, one just anterior to the bulb; the other, one and a half inches behind the meatus, measuring twenty and sixteen respectively. One drachm of a 4 per cent. solution of cocaine was injected as an anæsthetic, and afterwards two drachms of oil as a lubricant. Rogers' urethrometer and urethrotome were used. Contractions cut, meatus enlarged, and a No. 32 steel sound passed into the bladder. Anæsthesia almost complete. Hemorrhage trivial. Splints and bandages applied, and patient sent to bed. On the third day he came before the class, and the instrument was again introduced. The patient had a chill, with slight fever, after the first operation.

II. *Vesical Calculus—Lithotomy.*—Male aged 36; marked symptoms of stone, increasing for nearly three years. Urine showed pus cells and much mucus; general condition fair. A steel sound detected the stone. Chloroform, and median incision per perineum. The stone being too large for easy extraction, the prostate was incised on the left. Uric acid stone, weighing 447 grains, and oval in shape. No evidences of shock, and only two ounces of blood lost. A rigor the next morning; temp. 100½°; antifebrin used with success;

quinine and opium every four hours for three days. At the end of second week the wound had healed, and the patient was sent home.

III. *Tumor Within the Scrotum.*—Patient aged 58. Tumor first noticed eight years ago; growth gradual and painless; dragging sensation on the right cord; health unimpaired; tumor pear-shaped, apparently involving or including the right testicle; cord free and uncomplicated for two and a half inches below the abdominal ring; swelling smooth, with slight fluctuations. The tumor was distinguished from hæmatocele, varicocele, reducible and irreducible hernia, orchitis, epididymitis, and a *solid* tumor (sarcocele, four kinds—simple, syphilitic, tuberculous, cancerous). A translucent light showed that the trouble was hydrocele. A pint of fluid drawn off. Patient declined any radical operation.

IV. *Gonorrhœa—Warts.*—Male; acute stage of disease; usual treatment and present indications pointed out. To the warts chromic acid (ʒij—to water ʒvj) was applied. Patient better at next clinic. Injections of tannic acid and red wine ordered, and chromic acid reapplied.

V. *Vesical Calculus*—Male, aged four; cystitis for two years; bladder explored, and calculus detected; chloroform, median incision in perineum, with lateral incision of the prostate; uric acid stone the size of a partridge egg; no bleeding; recovery without a bad symptom.

VI. *Exstrophy of Bladder.*—Patient a four year old child. "The everted and exstrophic bladder formed a fiery-red lobulated mass, situated just above the site of the pubic bone, and projected one inch above the level of the surrounding integument. The opening in the abdomen was rather oval-shaped, measuring 3x2 inches in vertical and transverse diameters. The margins of the opening were very hard and cicatricial. The openings of both ureters were found and probe introduced. There existed, as is common with this condition of the bladder, epispadias, which extended the entire length of the penis. The mucous covering of the bladder was prolonged down along the dorsum of the penis, where it lined a groove which was the representative of a urethra. This groove was bounded on the sides by the corpora cavernosa, or rather these bodies were wide apart, and the urethra lay between with its upper wall absent. The finger passed into the rectum revealed the symphisis pubis, represented by a fibrous band stretched across from one pubic spine to the other." Case operated on in private.

After-Treatment of Cataract Extractions and Iridectomies.

Dr. R. O. Cotter, of Macon, Ga., (*Atlanta Med. and Surg. Jour.*, Jan., 1888), after referring to the harm that has doubtless resulted from too much interference after these operations, gives his treatment in his last six cases as follows: No antiseptic except pure water; all instruments first dipped into alcohol; a 4 per cent. solution of cocaine; Graefe's linear extraction; immediately after the operation a solution of atropine (gr.ij—ʒj) in the eye, anointing the lids with vaseline, applying soft compresses of absorbent cotton over both closed lids, and a bandage. Patient is put to bed, allowed to sit up some the next day, and then left alone. No solid food allowed for three or four days, as mastication causes blood to flow toward the eye. Patient visited in six hours. If hot tears gather within the lids, they are let out —otherwise nothing is done. Dressing changed in three or four days, if all goes well; and perhaps then a two grain solution of atropine is used

Diphtheria—Its Cause and Treatment.

Dr. L. H. Jones, of Atlanta, Ga., (*Atlanta Med. and Surg. Jour.*, Jan., 1888), believes the disease to be epidemic in character and produced by a "specific, living, and self-reproducing poison." Dr. Jacobi, and Drs. Wood and Formad, of Philadelphia, are extensively quoted with regard to the cause, and reasons are urged for the belief that defective sewerage is a prolific cause of diphtheria, as well as of typhoid fever, etc. In the treatment sulphite of soda, though not a specific, is "a remedy which, if employed in time, will cut short the disease, and which we can safely use as a prophylactic, and by its use prevent the spread not only of diphtheria, but also of scarlet fever, and possibly other contagious diseases." In more serious conditions chlorine water is recommended, but it must be used with caution, being a powerful heart stimulant. Early and free stimulation is demanded, and local applications and sprays should be used. Tracheotomy and intubation must be resorted to when required and feasible.

Treatment of Pneumonia.

Dr C. B. Leitner, of Flora, Ala., (*Atlanta Med. and Surg. Jour.*, Jan., 1888), gives the following treatment: One-half ounce of ground senega root, ten or twelve jaborandi beans, twenty-four ounces of water, to *simmer* down to sixteen. If below this, add hot water to make sixteen ounces. Then

add nitrate of potash ʒij, and quinine, ʒj. Dose—ʒss every two hours until sweating is produced. Patients' bowels must be moved with a mercurial, or some other cathartic. Counter irritation by cupping and blistering. If the urine be scanty, buchu tea is used with the expectorant. Opium to produce sleep. Acute pain in the pleura must be watched. When the skin is cool and pleasant whiskey or brandy is used. Be controlled by the use of the stethoscope. No arterial sedative is used unless the skin is very dry and the temperature much elevated, and then aconite—no veratrum —is the agent employed.

Gonorrhœa Speedily Relieved.

Dr. J. J. Buster, Mt. Willing, S. C., (*Atlanta Med. and Surg. Jour.*, Jan., 1888) used, in an urgent case, bathing in hot water and injections of same; then fld. Canadensis (Parke, Davis & Co.) ʒij to water ʒvj as an injection, held in for three minutes. In about half an hour an injection of subnitrate of bismuth in water was used, being retained for five minutes. Apply ung. belladonnæ from prostatic portion to glands externally. Take potass. bi-carbonas gr. xx every four to six hours. The patient was promptly cured within ten days.

Superinvolution of the Uterus following Trachelorraphy.

Dr. Virgil O. Hardon, of Atlanta, Ga., (*Atlanta Med. and Surg. Jour.*, Jan., 1888) cites two cases to illustrate the fact that superinvolution of the womb is a possible sequel of trachelorraphy. "In the two cases in which I have seen this condition follow the operation of trachelorraphy, the laceration of the cervix was uncomplicated by any other lesion, and the symptoms which called for the operation were due entirely to subinvolution. In both cases the repair of the cervix restored the patient to a condition of robust health, which continued for several months, and was followed by a gradual development of nervous symptoms, suppression of menstruation, and an atrophic condition of the uterus as shown by physical examination. The treatment of these symptoms was based upon a diagnosis of superinvolution of the uterus and consisted of frequent and long-continued intra-uterine faradization extending over a period of two months in one case and three months in the other. The results of this treatment were eminently satisfactory and served to confirm the diagnosis. The womb was restored to its normal size; menstruation was re-established, and the nervous symptoms entirely disappeared."

The Treatment of Intermittent Fever.

Dr. Robert C. Kenner, of Louisville, Ky., (*Am. Prac. and News*, Jan., 1888), has quite a thorough article on this subject. In the cold stage hot bottles to the feet and warm irons against the spine are useful; very little fluid of any kind—even hot drinks; opium at the beginning will often abort an attack, and in severer cases chloroform. Stimulants are dangerous. In the hot stage vomiting can be treated with oxalate of cerium, cracked ice, calomel, dry cups over epigastrium, and morphia—these measures being tried in turn. For the headache bromide of potassium, cold wet cloths, and tepid sponging are useful. The indications for quinine as given by the late Prof. Bemiss are pointed out. With the temperature over 107° antipyrin is employed when the cold or temperate bath is not used. The means of preventing future paroxysms are carefully considered and the various remedies referred to. Iodine, nitric acid, arsenic, lemons, piperine, dogwood, eucalyptus, and the picrate of ammonium are more or less useful; but cinchona is the main reliance. The writer then refers to *treatment directed to the interception of subsequent paroxysms in the different types.* These types are, 1, The bilious type, in its marked form; 2, That in which biliousness is less marked or even absent; 3, That in which the paroxysms have persisted long and the patient has malarial cachexia; 4, That in which the paroxysms seem to recur from *habit.* In the first type, calomel and colocynth must be used first; in the second, quinine acts as much like a specific as possible; in the third, removal from malarial influences is imperative, acid tonics must be given; and in the fourth, tonics, nervines, cold baths, etc. are indicated. Opium here, in full doses, one hour before the expected paroxysm is one of the best means of cure. For enlargement of the spleen tonics, and the ointment of biniodide of mercury over the organ, are the best measures.

Cocaine Toxæmia.

In an article read by Dr. J. B. Mattison, (*Am. Prac. and News*, Jan., 1888), before the American Association for the cure of Inebriates, Nov. 8th, 1887, the opinions of a number of observers are given, and some illustrative cases. The conclusions are as follows: "There is a lethal dose of cocaine; this dose is uncertain; toxic effects are not rare; they may be the sequence of doses large or small, in patients old or young, the feeble or the strong; this risk should induce caution; antidotes should be at command; these are nitrite of amyl and hypodermic morphia."

Prophylaxis and Treatment of Malarial Hæmaturia.

Dr. B. Frank Humphreys, of Hawkins, Tex., (*Tex. Cour. Rec. of Med.*, Dec. 1887), concludes his paper upon this subject. He refers to the manifestations of the disease in himself and in members of his family, and states that cholagogues, quinine, ergot, morphia, and diaphoretics were the means by which the severity of the attacks were decidedly lessened. The following deductions were reached: 1, That malarial hæmaturia is primarily a hepato-genetic form of disease, due to retention in the blood of cholesterin with more or less disintegrated bilirubin and biliverdin; 2, If the disease is not recognized and treated until hæmaturia appears, the last chill preceding the renal trouble may be of a very grave form; 3, Anti-malarial treatment does not invariably prevent hæmaturia; 4. If quinine is promptly withdrawn as soon as hæmaturia sets in, another chill will not occur; 5. Anti-malarial treatment, though not always preventing hæmaturia, will materially lessen its malignancy. The writer lays stress upon nourishing diet, and recommends predigested milk.

Treatment of Dysentery and Pneumonia in Texas.

Continued in *The Tex. Cour. Rec. of Med.* Dec., 1887. Dr. J. F. Y. Paine, of Galveston, considering the disease a local one, administers, first, an ounce of Epsom salts, and if the tormina, bloody mucus etc. recur, he continues the salts in drachm doses, combined with deodorized tincture of opium. Flushing out the entire extent of the large intestines, whether in the congestive, exudative, or ulcerative stage of dysentery, is an excellent measure when properly and carefully done. Ipecac does good in some cases. Tormina often yields to one or two grain doses of cocaine every three to six hours, the drug being given dry, with sugar of milk in capsule. Small doses of mercuric chloride (1-120th to 1-60th grain three to five times in twenty four hours) are beneficial when the abdomen is tender and tympanitic. Napthalin and bismuth fulfil the same indications. Salines should be stopped when tormina, tenesmus etc. cease. Subsequent diarrhœa is treated with opium and nitrate of silver, or sulphate of copper. Sleeplessness yields to morphia hypodermically. In profuse sero-sanguinolent discharges ergot has served well. Fomentations, mild counter irritation, rest, and careful dieting are very important. In chronic dysentery, ulcers are treated with a strong solution of nitrate of silver and dry iodoform, with opium suppositories when required.

Syphilitic taint must be looked for. In malarial complications quinine and arsenic are the sheet anchors. Epidemic dysentery is treated according to the same rules, although supporting measures are more indicated.

In Pheumonia,

Dr. J. O. Lowrie, of Timpson, uses antipyrin (if the pulse be hard and bounding, with no lividity); hot fomentations; three grains of quinine every four hours through the congestive and hepatizing stages (as his locality is malarial); if delirium is active, bromides and chloral; if low and muttering, stimulants; if third stage is delayed, blisters and carbonate of ammonia; expectorants seldom.

Dr. W. C. Fisher, of Galveston, gives a mercurial purge with a little ipecac at first in the sthenic type; hot poultices; quinine in five grain doses, with bromide of sodium or potassium, or opium in pain; antipyrin when indicated; digitalis or strophanthus if cardiac depression follows antipyrin; tincture of iodine over the lung after acute stage; also the following, ℞. Ammoniæ muriat. ʒj. syr. prun. virgin., syr. picis lig., āā ʒj, syr. tolu q. s. ad ℥iij. Dessertspoonful every three or four hours; hydrate of terpina and terebene; in anæmic subjects little medicine and strong supporting measures; in catarrhal pneumonia, stimulating expectorants, tonics, and stimulants; croton oil and hot poultices. The temperature of the room is very important, and nourishment is the *sine qua non.*

Dr. F. A. Schmitt, of Schulenburg, never carries antiphlogistic treatment beyond a certain limit and gives quinine, iron, and stimulants on the fourth day. When the disease occurs in previously healthy subjects, and only one lung is affected, expectant treatment is adopted, and a placebo given. Blistering is deprecated. In cases marked by high fever and rapid pulse, with symptoms pointing to blood stasis in the lung and to cerebral hyperæmia, bleeding is advised, although in a practice of twenty years the writer has used this measure only once.

Dr. H. C. Ghent, of Belton, gives castor oil in the first stage if constipation be present; morphine hypodermically for pain; hot applications, rubefacients etc.; two to five drops of Norwood's tincture of veratrum with five to ten drops of tincture of opium every three hours, the effects being carefully regulated. Active catharsis subsequently must be avoided. Nourishing food, and possibly digitalis in place of the veratrum are needed later. The kidneys and digestive tract must be closely watched. In the second stage,

applications to the chest; morphine and atropia hypodermically, but with increased caution; stimulants etc. Dover's powder acts well in some cases troubled with cough. Carbonate of ammonia, turpentine, wild cherry, and kindred drugs are given later on in the second stage. Undue exposure on examination of the chest is deprecated.

Constipation.

Dr. Joseph M. Mathews, of Louisville, Ky., (*Medical Herald*, Jan., 1888) explains the causes and manner of production of constipation, showing why it is that the fæces are as often impacted in the sigmoid flexure of the colon as in the rectum. The direct and indirect evils are pointed out, and the local and constitutional damage emphasized. The first thing in treatment is to attend strictly to the laws of hygiene. Other measures are as follows: Careful search of the rectum for impactions and removal of the same by injections of hot water through a rubber tube, say a No. 4, Wales rectal bougie. Divulsing the sphincter may be necessary if it is irritated, the procedure, when properly done, being harmless. If, after removal of impactions, atony, congestion, inflammation, or ulceration of the sigmoid flexure remains, cold water injections are continued—these especially in atony. A little tincture of iron may be added. If ulceration exist the following is a useful injection:

℞. Iodoform.....ʒss
Balsam peru.....ʒj
Sweet almond oil .... 1 pint.
M. Sig.—Inject one ounce twice daily.

Use saline aperients internally. Subsequently the following:

℞. Aloin.....gr. $\frac{1}{5}$
Strychnine .....gr. $\frac{1}{60}$
Ext. belladonnæ.....gr. $\frac{1}{8}$

To be taken each night at bed-time.

Iron must be used only when plainly indicated. The writer called attention a year ago to the same fact mentioned by Sir Andrew Clark, in the *Lancet*, Nov. 1887—that the chlorosis of school girls was largely, if not mainly, owing to the results of prolonged constipation.

Brain Fractured by a Blow without Injury to the Skull.

Reported by Dr. C. C. Fite, of Knoxville, Tenn. (*Nashville Jour. of Med. and Surg.*, Jan., 1888). The wound was over the right parietal bone, slightly above and in front of the

parietal eminence; skin crushed for an area the size of a half dollar, and a cut two inches long running up and down; bone not denuded of the periosteum, and no evidence of fracture. The wound had been closed at first, but the next morning the patient appeared to be suffering from profound shock. No symptoms of compression; use of both sides; pupils natural, at this time; but inability to speak. The pulse being 80 and steady, the temperature normal, and the respiration natural, the symptoms were referred to concussion and alcohol, and trephining was not decided upon. Bromide of potassium in five grain doses, to be increased if necessary, was ordered. The next morning the symptoms were better, but salts and enemata were ordered, as the bowels had not moved since the injury. Subsequently the symptoms grew worse; pulse 120 and irregular; stupor more profound; respiration 24; temp. 103; paralysis of right side; great difficulty in swallowing; cathartics of no avail. Trephining was done, and as soon as the dura mater was reached there was a flow of several ounces of black blood. Death five and a half days after the blow. At the autopsy the skull was found to be unusually thick and strong. "The cerebrum was carefully separated from its attachments and from the cerebellum, the pons varolii being cut through. Over the lower portion of the left hemisphere was found a thin coating of blood and the membranes were all congested." There was a fracture of the brain substance 2.5 inches long filled with black clots. The rent was *directly opposite* the blow. The cerebellum was rent to the extent of .5 of an inch on the lower surface of the left hemisphere. At a consultation on the third visit the view was held that there was either a fracture of the skull, or rupture of the brain substance or a blood vessel.

Cure of Gleety Discharges from the Urethra.

Dr. Waldo Briggs, of St. Louis, Mo., (*Nashville Jour. of Med. and Surg.*, Jan., 1888), advises, in gleet accompanying organic stricture, incision of the meatus at its lower part in order to effect dilatation to the full extent of the urethra. He thinks that the systematic use of the sound will not cure gleet due to a granular urethra, but that destructive cauterization, such as is obtained from a solution of nitrate of silver (gr. x—xv to ℥j), should be resorted to, and the resulting inflammation treated. The inflamed lacuna should be consided as a sinus and treated accordingly.

Recent British, French, and German Obstetrics and Gynaecology.

This paper (*Nashville Jour. of Med. and Surg.*, Jan., 1888), is a selection from the report made by Dr. E. L. McKee, of Cincinnati, before the Cincinnati Academy of Medicine, Nov. 7th, 1887. Credé believes that Caesarean section is preferable to craniotomy, and speaks highly of Sanger's operation. Leopold, of Dresden, has obtained astonishing results from antisepsis, having no death from infection, in 1,686 consecutive deliveries, and no death chargeable to the hospital in 1,403 deliveries. In the last 500, there has been but one case of parametritis. The sexual organs, especially the vagina, are thoroughly cleaned, the latter being washed with a $\frac{1}{4000}$ sublimate solution. The strictest cleanliness and disinfection are required of all attendants. Injections after delivery are seldom ordered, and women not examined for some reason had no injections prior or subsequent to delivery. Kaltenback maintains that the obstetrician should follow the same antiseptic rules as the gynæcologist; but considering injections after delivery dangerous, he disapproves of them except when demanded. Dr. D. Berry Hart thinks that, in the ordinary form of vertex presentation, the term 'distension of the head' as the fourth consecutive movement of labor is misleading. He denies that the chin leaves the sternum while passing the perineum, and thinks the best way to avoid a tear is for the occiput to lead, and means adopted to favor occipital dipping, and not dipping of the sinciput. The attendant presses with his thumb, covered by a napkin dipped in a sublimate solution, gently in front of the anus nearly in the direction of the axis of the pelvic outlet. At the Samaritan Free Hospital in London for women and children, Mr. J. Knowlsly Thornton uses strict antisepsis, and in the same hospital Dr. G. Granville Bantock does not, the results in either case being about the same.

"No case of puerperal peritonitis ought to be allowed to die without the abdomen being opened," is a recent utterance of Mr. Lawson Tait. Apostolli, of Paris, has gained excellent results from electricity in uterine filroids. He considers the positive pole the "medicament par excellence" in bleeding fibroids. No claim is made to a removal of the tumors, but to such a reduction in size as to render them unnoticeable to the patient. The result is permanent when the following measures are faithfully carried out: Strict antisepsis before and after the operation; puncture to be made to a depth of not more than one or two centimeters

with a small steel trochar or needle; feeling for and avoiding arteries. In cases of metrorrhagia the positive pole is placed in the uterus; the negative in other cases. This treatment avails in neuralgias, especially the ovarian type, and in involution, versions, and flexions. Apostolli's procedures are advocated by such men in Great Britain, as Playfair, Robert Barnes, Macon, Sir Spencer Wells and both Keiths.

German gynæcologists claim that cancer of the uterus is best treated by removal of the organ. With increased experience, the operators have less mortality. The prognosis in the total extirpation of the uterus is as good as in the supra vaginal method, and the former operation is rapidly supplanting the latter.

Attendants on the laparotomy clinics of Olshauson and Martin are required not to expose themselves to infection on the day previous; to wear clean clothing; to take a full bath immediately before coming to the operation; to remove the coat, vest, collar, necktie, and suspenders before entering the room; and not to touch any of the instruments or materials used in the operation. The operator and assistants wear a suit of muslin, and are thoroughly antiseptic.

Sanger's method in Cæsarean section is gaining confidence among the Germans and is highly recommended by Credé, Gusserow, and Leopold. Leopold recommends complete closure of the abdominal cavity with the continued suture after the protrusion of the uterus. Bleeding after incision of uterus is controlled by a rubber band or manual compression. The uterine cavity is carefully freed from decidua, and the sutures must be very exact. The organ is opened by an incision beginning near the fundus and extending down to the place where the peritoneum is loosely attached to the inferior uterine segment. The cavity is strewn with iodoform, and the cavity closed with eight silver sutures, which embrace the muscle without the decidua. About sixteen silk sutures, penetrating the peritoneum only, are then applied. The operation has been most successful in Germany and in Sanger's hands, in whose favor there is a difference of 30 per cent of recoveries.

Surgical Clinic of Dr. W. T. Briggs.

Reported by M. Larkin Smith, Hospital Interne, (*Nash. Jour. of Med. and Surg.*, Jan., 1888).

Hip-Joint Disease—Excision.—Case, a boy aged 15; strumous diathesis; had a fall; usual symptoms of coxalgia;

joint now disorganized, with a number of fistulous orifices upon the buttock and upper part of thigh; great pain at night. Excision was performed, the wound washed with a $\frac{1}{4000}$ sublimate solution, packed with sublimated gauze, and the limb supported by a long external splint. Hemorrhage greater than usual, but no vessels ligated. Reaction good. Dressings removed in eight days, and everything found favorable. The case has done well.

Amputation of the Leg.—A young lady aged 19, received some years since a severe sprain of the ankle, followed by synovitis, periosteitis and osteitis. Right leg and foot much enlarged; skin glistening and pearly; foot inverted; all motion at the ankle joint lost; much pain; and a number of fistulæ over the leg. Amputation at the point of election opposite the tubercle of the tibia; lateral flaps, and strict antisepsis. No bad symptoms followed, the temperature not exceeding 100° at any time. Patient discharged in three weeks.

Compound Fracture of Both Bones of the Forearm, with Division of Ulnar Artery and Ulnar Nerve.

Male aged 35. Arm caught in machinery, and badly mutilated. An effort was made to save the limb. Washing with sublimate solution; catgut ligatures on the cut ends of the artery; ends of the severed nerve sutured with fine catgut; muscles treated likewise; two drainage tubes; bones adjusted accurately; wound partially closed with catgut sutures and covered with a number of layers of antiseptic gauze; arm placed upon one anterior splint, in such a way that the wound could be dressed without removing the splint. Suppuration was very limited, and there is every indication for the patients having a useful arm.

Nervous Manifestations in Typhoid Fever.

Dr. Philip Zenner, of Cincinnati, (*Nash. Jour. of Med. and Surg.*, Jan., 1888), states that mental symptoms are present in from one-fourth to one-third of all cases of typhoid fever. Probably one per cent. of insane cases are of typhoid origin. The worse the mental symptoms, the harder the cure. Bahl has found that the amount of fluid in the cranium increases during the first and second week of the disease, and that degenerative and atrophic changes occur. Besides these causes, nervous temperament, excitement, excesses (especially alcoholic), and heredity play an important part. In about one-third of the cases delirium leaves in one week;

but chronic cerebral trouble sometimes is set up, and is more apt to be incurable if it is a quiet melancholia. About one-third of the cases of delirium recover in a week, and the prognosis is more favorable in febrile than in non-febrile delirium. Treatment consists in reduction of fever and in sustenance. Betke states that in the Basle Hospital cold water has had a decided influence in reducing the mortality of febrile delirium.

Nephrotomy for Suppuration in the Kidney Produced by a Wound.

Dr. T. B Wilkerson, of Young's Cross Roads, Granville County, N. C., reports, (*N. C. Med. Jour.*, Dec., 1887) the case of a male aged 30 who, a year previous, had been struck in the right lumbar region by the top of a falling tree. For more than six months he had been confined to the bed, and suffered with serious local and constitutional symptoms. The urine showed albumen, pus, blood, casts, and granular matter. There was indistinct fluctuation over the kidney. Recognizing the gravity of the case, the writer decided to operate. The cyst walls were exposed, and on being nicked, pus spurted up nearly a foot from the cavity. The cyst was slightly in the shape of a mushroom, with the neck towards the pelvis of the kidney. The abscess cavity was cleansed with a solution of permanganate of potassium, and the true cyst wall swathed with a mop dipped in carbolic acid. A rubber tube was placed in the pelvis of the kidney, and kept in position by attaching it with a suture to the lips of the wound, which was closed with sutures and adhesive plaster. The cavity was washed out twice a day with a quarter grain permanganate solution. The following is given after every surgical operation:

℞. Acid. carbolic.....gtt. xij
Pulv. opii .....grs. vj
Quiniæ sulphatis.....grs. xv
M. Ft. pil. No. xii. Sig.—One three times a day.

For forty-eight hours afterwards there was considerable dyspnœa. The drainage tube remained in three weeks. Five weeks after the operation the wound had healed, and the improvement in the general symptoms was marked. Eighteen months having passed the patient is now restored to perfect health. The writer discusses the *pros* and *cons* of the operation.

Puerperal Convulsions.

Dr. L. G. Broughton, of Kenly, Johnston County, N. C., (*N. C. Med. Jour.*, Dec., 1887), after carefully considering the disease, and the opinions of authorities upon it, concludes that the real cause is over excitability of the nervous system, leading to a determination of large quantities of blood to the cerebro-spinal system. Blood-letting is *the* remedy, and *afterwards* morphia. Since adopting this treatment he no longer dreads the disease. In many cases morphia will not be needed.

Notes on Gynæcology—Displacements of the Uterus.

Dr. R. A. Patterson, of Aurelian Springs, N. C., (*N. C. Med. Jour.*, Dec., 1887), gives the following case illustrating the efficacy of well-adjusted pessaries in these conditions: I. Patient aged 30, the mother of two children; unable since birth of last child, aged 12 months, to exert herself; confined to the bed for past two months; general appearance indicative of fair health, but showing some anæmia; pain in pelvis and lower extremities. Manual examination revealed the os resting on the pelvic floor. Thomas-Hodge pessary being adjusted, the patient immediately walked without pain or difficulty, was able to discharge her daily duties in and out of doors, and became pregnant. After delivery her trouble recurred but was rectified by Hoffman's soft rubber pelvic pessary. II. Patient aged 26, with one child aged 3; had aborted nine months before; anæmic; pain in abdomen and lower extremities; leucorrhœa; incapacity for any work. The womb was prolapsed and anteverted with granular inflammation of os and cervix. For the latter fluid extract of pinus canadensis, ℥i and carbolic acid, gr. x. was applied, which, with rest, removed the trouble. Hoffman's pessary inserted; elixir calisaya, iron, and strychnia given. Prompt recovery, and subsequent birth of a child. III. Patient aged 30, married fourteen years. Great pain; violent headache at catamenia; occasional spasms and insensibility; much suffering during and after defecation; paleness and emaciation; multiparous. The womb was attenuated and retroflexed, causing stenosis at internal os; one ovary prolapsed. The retroflexion was easily overcome, but there was some difficulty in retaining it in position. Stenosis greatly benefitted by bongies and sponge tents. Treatment enabled her to pass her periods sometimes without pain, and at others with so little pain that her general health was largely restored and the grave symptoms relieved. IV.

Patient aged 35, mantua-maker, had borne several children, the youngest being seven years old, since whose birth she had been in bad health. Inability to walk without intense pain; feeble; anæmic; pain in various regions. Womb was prolapsed and anteverted. Hoffman's pessary, and iron. General health restored, and ability to walk two miles without inconvenience. V. Patient aged 35, married seventeen years; aborted a few months after marriage; never pregnant afterwards; dates her trouble from the abortion. Pain in pelvic region and back; walking caused great weariness and discomfort; dyspepsia; insomnia; constant and serious pain in right supra-iliac region. The os rested on the pelvic floor, fundus leaning to left side; no abrasion or ulceration of os; sound entered two inches without any obstruction or pain; appearance indicated good health, but the patient complained of great suffering. The womb was replaced upon the end of the finger without pain, a tampon of cotton wool saturated with fluid extract of pinus canadensis placed against the os, and one without the extract behind this. Patient much relieved, slept well, and walked with more ease; but pain in the right side continued, which was greatly increased at times. Tampon removed, vagina syringed with hot water, and Hoffman's soft rubber pessary No. I., applied. This did not suit, and No. II. was substituted. Ten days afterwards the writer found the patient in great pain, and supposing that this was due to the pessary, was about to remove it, but was told by the patient that it had given her much relief. On removing it, there was no swelling or tenderness found in or near the uterus, or in the pelvic region. The os and cervix could be pushed to either side without any pain, but there was tenderness when the uterus was pushed up. There was every symptom of acute peritonitis. It did not seem probable that the instrument caused the suffering, which seemed to be in the coecal region, and the nature of which was not ascertained. Death in four days. "But for the fact that the pain originated so high up, nearly on a line with the umbilicus, in what seemed to be the seat of an old lesion of doubtful nature, the question might arise, can a pessary produce peritonitis without giving rise to any symptoms, either objective or subjective, of local malady?"

Comparison Between Surgical Diseases of the White and Colored Races.

Dr. Louis McLane Tiffany, of Baltimore, Md., (*N. C. Med.*

Jour., Dec., 1887), gives the following notes derived from a record extending over a period of thirty-four months, and embracing 4,930 surgical cases, most of whom were out-door patients of a general hospital. Of the 4,930, 64 per cent. were whites. The negros include mulattoes of various shades. "Where whites and black negroes differ in their behavior under a disease, mulattoes are apt to occupy a middle position, corresponding more or less to their gradation of color."

	WHITES.	NEGROES.
Abscess occurred in	57 per cent.	43 per cent.
Abscess of neck and axilla	44 "	56 "
Abscess of hand and fingers	75 "	25 "
Alveolar abscess	45 "	55 "

Alveolar abscess very rare in the dark negro, but frequent in the light mulatto.

Enlarged lymphatic glands were found with cervical and axillary abscesses in neck, axilla, and groin, whites, 41 per cent.; negroes, 59 per cent

Suppuration is greater in the syphilitic negro than in the syphilitic white.

	WHITES.	NEGROES.
Ganglion	83 per cent.	17 per cent.
Bursa	77 "	23 "
Hydrocele	94 "	6 "
Fistula in ano	71 "	29 "

In the negro the latter has rarely been noticed except with tuberculosis.

	WHITES.	NEGROES.
Internal hemorrhoids	82 per cent.	18 per cent.
Spinal caries	47 "	53 "

The latter is seen in the lower dorsal region of the negro oftener than elsewhere, and recovery from spinal caries is more frequent among whites. An adult or middle-aged negro with the humpback of cured Potts' disease is a rarity.

Dislocations (shoulder as a standard), whites, 82 per cent.; negroes, 18 per cent.

Fractures show no difference. Keloid is very common among negroes, and rare in whites; and the tendency to it is more pronounced in early life, while it is probable that in middle and old age the formations cease growing and undergo atrophy. Removal of this in early life is to be deprecated, "speedy recurrence being inevitable;" but when the period of rapid growth is passed, the tumor can be removed.

Lipoma and fibroma are more frequent in negroes; sebaceous cysts in 88 per cent of whites. Telangiectatic formations are very rare in negroes. The most common malignant growth in negroes is sarcoma, usually osteo-sarcoma; but carcinoma is rare, while there is not recorded a single instance of apithelioma of the face or lip of a negro. The writer recalls only one case of epithelioma of the tongue in negroes. Inflammatory gonorrhœa is more frequent in whites, the reverse being true of chronic urethral discharge. Gonorrhœal rheumatism is infrequent in negroes. Inflammatory phimosis, usually from chancroids, occurs in 27 per cent. of whites. In the negro lateral curvature of the spine is very rare, but rickets occurs in 63 per cent. Congenital deformities are exceptional in negroes, and when seen are apt to be in light mulattoes. Cleft palate, harelip, non-paralytic talipes, exstrophy of bladder, epispadias, hypospadias, and spina bifida have not been seen in the dark negro. One case of spina bifida, one of harelip, and two of congenital club-foot have been met with in negroes having much white blood in them. The following suggestions are made:

1. Surgical affections pursue different courses in the white and colored races under identical hygienic surroundings. 2. Surgical injuries and operations are better borne by negroes than whites. 3. Surgical diseases involving the lymphatic system, especially if tubercular, are more fatal in negroes than in whites. 4. Congenital deformities are more rare in negroes than in whites. 5. Surgical differences observed between whites and negroes are due to race peculiarities.

Treatment of Organic Stricture of the Penile Portion of the Male Urethra.

Dr. J. W. Irison, of Fort Worth, Tex., (*Tex. Cour.-Rec. of Med.*, Jan., 1888), carefully discusses the anatomy of the urethra, stating that organic stricture is usually found in the spongy portion of the urethra, the majority of the strictures in the deep urethra being caused by reflex nervous action from organic stricture in the penile portion. The object of the paper is to call attention to the internal urethrotomy as carried out by Otis, who, though not claiming originality, has perfected the operation and the instruments used. The writer begins the day before the operation by giving the patient bicarbonate of sodium freely and continuing it for a week or ten days afterwards. Four hours

previous to the operation he gives ten grains of quinine by the mouth, and one-fourth of a grain of morphine hypodermically. A 4 per cent. solution of cocaine is the anæsthetic, and the canal is washed with a $\frac{1}{3000}$ sublimate solution. Directions are then given for the use of the urethrametre and the urethrotome, and for the subsequent dilation and general management of the urethra. In a succeeding paper illustrative cases will be published.

Puerperal Convulsions.

Dr. H. C. Worley, of Red Oak, Tex., (*Tex. Cour.-Rec. of Med.*, Jan., 1888), reports a case in which a patient had convulsions after the third labor. She had had them in her first labor also. Chloroform, chloral, atropia, whiskey, morphia, blood-letting, enemata, hypodermics of digitalis and brandy, and enemata of chloral and bromide of potassium were used, and every means used for moving the bowels short of castor oil and elaterium. The bowels finally moved and the convulsions ceased; "maybe they wore out," adds the writer. Unconsciousness remained for two days, but both the child and mother did well. The writer states that he would use, in another case, croton oil and elaterium freely and would "push chloroform or blood-letting even to syncope;" these measures being added to others already mentioned, and combined, if necessary, with counter-irritation and external applications.

Treatment of Dysentery and Pneumonia in Texas.

Dr. E. J. Beall, of Fort Worth, (*Tex. Cour.-Rec. of Med.*, Jan., 1888), refers to two forms of dysentery. In the first the following symptoms are noticed: Chilliness; headache; aching limbs; remittent or intermittent type of fever; stools frequent, with termina, tenesmus, and bloody mucus, sometimes cystic tenesmus: temperature 100 to 104; skin moist; pulse 90 to 120; perhaps flushing of the face and injected eyes, or paleness of surface. In the second class, less precipitancy and systemic disturbance; actions less; not so much mucus, but perhaps more blood, darker in color; more serum; lower temperature; pulse more frequent; rapid asthenia; assuming an epidemic phase; very mild at times, at others very malignant. For the first type, formulæ are given, of which the following drugs are the basis: Castor oil, sulphate and other salts of magnesia, quinine, blue mass and Dover's powder. In high fever aconite and bromide of sodium are used. Buttermilk is highly recommended. In

the second variety, hygienic measures are all important, and the drugs used are those which meet special indications. Opiate and astringent injections are deprecated on the ground that they favor torpor of the rectum and a retention of disease-products. Antiseptic injections are favored. The writer concludes by referring to the treatment used by "old Doctor Edwards," of St. Louis, who, when giving the writer his treatment, was the oldest practitioner west of the Mississippi, and whose prescription was equal parts of apple vinegar and mint water saturated with salt. Dr. Edwards said that he had never lost a patient. The writer, in a subsequent case, prescribed acetic acid, mint water, and salt *ad saturandum;* a desert spoonful every two or three hours. Buttermilk was also used freely. The patient recovered.

Acute Pneumonia.

Dr. C. L. King, of Whitesboro, uses the following: Hypodermic of morphine; Rigollot's mustard paper, followed by a flaxseed-meal poultice enveloping the thorax; calomel, ipecac, and opium; quinine to cinchonism, and kept up as long as the temperature is above 98.4°; antipyrin *pro re nata*, of the temperature is 104° or 105°; aconite and acetate of potassium; morphine, muriate of ammonium, syrup of tolu and syrup of wild cherry; castor oil once a day; nutritious diet.

Dr. Chas. M. Ramsdell, of Lampasas, states that uncomplicated pneumonia, according to Bennett, is not mortal; but that owing to the climate and hygienic surroundings of Central Texas the disease is very fatal in that region, the patient usually dying in such cases within a week. The first measure adopted is to protect the patient from atmospheric changes; then to keep him as much at rest as possible, and to envelope the chest in flannel; or if this is not at hand, to use thick layers of cotton, the whole being surrounded with oil-cloth. This is worn until convalescence is established. Dover's powder in the early stage, or a mixture of which muriate of ammonium forms the basis, after resolution begins, is used for the cough. Liquid food and stimulants are used freely throughout the attack; milk punch, eggnog, and strong broths at intervals of two to four hours. If the pulse is frequent and feeble, and there seems to be engorgement of the lungs, digitalis is used freely until relief is obtained. Purgatives sometimes, blisters rarely, venesection never. During the first few days aconite or veratrum sometimes, if the fever is high.

Dr. B. C. Thompson, of Blossom Prairie, adopts the following treatment: Usually, calomel and bicarbonate of sodium followed by epsom salts; quinine and antipyrine for reduction of temperature; tinct. iodine locally and Dover's powder for pain, the opium being discontinued at the crisis; sweet milk and raw eggs freely; in asthenia alcohol, and strychnia; temperature of room 55° to 70°. The writer has laid aside poultices, etc., since cold applications are endorsed; and has discarded blisters, which, he thinks, favor heart clot and would do as much good on the leg or some other part of the body, as their curative effect is not local. He has also given up carbonate of ammonia, since it appears to him that it would add to the carbonic acid in the blood and thus favor coma and death about the critical period.

Treatment of Diphtheria.

Dr. J. R. Campbell, (*N. C. Med. Jour*,, Jan. 1888), calls attention in this article to the value of iron in scarlet fever and diphtheria. In a severe case of scarlet fever, seen by him with Dr. McCorkle, the usual routine treatment had failed, and he suggested to be given every three hours a tablespoonful of a saturated solution of iron and alum mass, preceded half an hour by milk punch. The effect was immediate and the patient recovered. The solution contains about twenty-five grains to the ounce, and is almost caustic; consequently it must be given in the dose mentioned only while the nerves and tissues are blunted by the septic poison. After this the writer and Dr. Corkle treated about sixty cases of diphtheria with a loss of three, these being from diphtheritic croup. Large doses of muriated tincture of iron were given in some such prescription as the following:

℞. Tr. ferri chloridi..... ....
Syrup simplicis aa parts.....ij
Ag. cinnamon, parts.....ij
ʒss every two hours.

Stress is laid upon the point that food should not immediately follow the iron, as a local as well as constitutional effect is desired.

Laparotomy for Large Myoma of the Uterus—Wound of the Bladder—Sloughing of Portion of Omentum—Formation of Uterine Fistulæ by the Separation of the Pedicle—Recovery.

This case is reported by Dr. R. A. Kinloch, of Charleston, S. C., (*N. C. Med. Jour.*, Jan. 1888). The patient was a col-

ored woman aged thirty-five, the mother of three children, the last of whom was twelve years old. Tumor noticed two years previous and was causing discomfort, protracted menstruation, and trouble in the functions of the bladder and rectum. General health good, but failing latterly. The tumor was solid, symmetrical, bosselated upon its surface, and about the size of a pregnant uterus of six or seven months. Vaginal examination revealed the uterus partially retroverted, elevated, and moving with the tumor, with which it was intimately connected; cervix natural; length of cavity somewhat in excess. Diagnosis—myoma, or fibromyoma, or uterine fibro-cystic tumor intraparietal or subserous. Operation of laparotomy and myornectomy was performed. Careful antisepsis; sublimate solution ($\frac{1}{10000}$) used for washing out the cavity; incision from two inches above the pubes to one inch above the umbilicus. The tumor was found subsequently to weigh fourteen pounds, and was surrounded by a closely adherent omentum. The writer states that in the separation of the tumor from its attachments he made an error in not proving that there was no connection with the bladder. A rubber ligature was placed around the smallest portion, after the growth had been raised up, but afterwards the chain of our écraseur was put around the pedicle. The portion above the chain was transfixed with long steel needles at right angles, and the mass was removed piece-meal, in order to watch hemorrhage. The last stroke of the knife wounded the bladder. The remaining portion of the tumor was trimmed off, the pedicle below the needles transfixed with a double ligature of braided silk, and this securely tied. Then the chain was loosened, several vessels had to be ligated. The wound in the bladder was closed by a continuous suture of fine catgut passed through the muscular coat and by subsequently bringing together the peritoneal coat over this by the continuous Lembert silk suture. A soft rubber catheter was introduced into the bladder and retained A glass drainage-tube was passed into the abdominal cavity, the abdomen closed by deep and superficial silk sutures, the pedicle painted with a solution of perchloride of iron, and the whole wound dressed with iodoform and cotton. During convalescense a piece of dead omentum passed from the abdominal opening, the occurrence being followed by rapid improvement. The patient had also a small fistula connecting the uterus and vagina with the opening in the abdominal walls; and when she returned home this fistula had not entirely closed.

Cocaine in Urethral Surgery.

Dr. A. F. Sampson, of Galveston, Texas (*Daniel's Tex. Med. Jour.*, Jan., 1888), after having closely studied the effects of cocaine upon the urethra, concludes that it is without doubt *the* anæsthetic. In seventy-four internal urethrotomies there was no shock; and in one case in which the writer had made a retro-injection with considerable shock to the patient, a subsequent attempt under cocaine was made with perfect comfort. The following directions are given regarding its use: First, irrigation with about one quart of some warm antiseptic solution, but if this cause pain, use cocaine as the first step; then inject about twenty minims of a ten per cent. solution, retained in the canal about fifteen minutes. If sensibility is not obtunded, repeat the injection. When granular urethritis exists, clearly seen on inspection, the patient is told to inject a ten per cent. solution on voiding his urine during the twenty-four hours. A case is reported in which urethral stricture was suspected, but under cocaine the urethrometer revealed nothing. With the writer's urethral speculum, an inspection of the first four inches of the urethra was made, and a small wart discovered two inches from the meatus. Granular urethritis had been set up. The growth was easily removed with a Wilde's snare. The following advantages of cocaine are mentioned, in conclusion: Its psychical effects; its valuable aid in obtaining a clear diagnosis and pathology; its prevention of urethral shock; its antiphlogistic and pæmostatic effects; the simplification of internal urethrotomy; the ability to make a satisfactory examination of the first four inches of the urethra.

Septic Fever.

Dr. L. D. Hill, of Webberville, Texas (*Daniel's Tex. Med. Jour.*, Jan., 1888), read a scientific paper on this subject before the Austin District Medical Society, Dec. 8, 1887. After quoting and considering the views of a number of authorities, the writer states that all agree on the following points: That the cause is putrefying animal matter; that some kind of microdemes is present in the septic fluid; that there is a stage in the septic process in which the poison is not absorbed into the blood with the microdemes in it; that there is a stage of development at which it is absorbed, the blood containing microdemes, and the disease being specific and communicable by the contact of a healthy wound with the infected wound or its fluids. The writer states that, in the many cases of surgery seen by him during the late war, the *manner of operating* had much to do with the success; and

he refers to the neatly-performed operations of Drs. Darby, Robert Battey, and J. C. Jones, and the good results when antisepsis was not as well known and practised as at present. He sums up his views as follows: "I believe that septic poison originates in putrefying animal matter, either within or without the system; that it may originate *de novo* in surgical wounds, in the genital tract of parturient women, in human excrement, and in dissecting-rooms; and, when fully developed, may be transmitted from a unhealthy to a healthy wound through the foul air of surgical stations and lying-in institutions, through water contaminated with sewer gas; but that it is generally disseminated by the fluids of an infected wound coming in contact with healthy wounds, transmitted from one to the other by the hands of nurses, surgeons and accoucheurs, and by the careless use of surgical gynæcological instruments, sponges, dressing material, etc., in hospitals and lying-in institutions. That the ordinary microdemes of all air and water, innocent in themselves, can by actual contact with putrefying masses become so impregnated with the poison upon which they subsist as to render them virulent in their nature; in fact, they become as sepsin, and not only act as carriers of the poison, but are themselves infectious and contaminating to the system."

Etiology of Infectious Diseases.

Dr. J. W. McLaughlin, of Austin, Texas (*Daniel's Tex. Med. Jour.*, Jan., 1888), refers, in this connection, to the "Liebig theory" and "germ theory" of contagion, his object being to show that both are partially correct, and that the "Liebig theory," when properly modified, is complemental to the other. The known phenomena of contagion are summed up, the theory of fermentation explained, and the analogy of the septic processes to fermentation pointed out, assuming that contagion is caused by specific bacteria. Stress is laid upon the fact that in fermentation alcohol is produced until the amount generated is sufficient to stop the activity of the yeast germ; and the discovery has been made by Oscar Brefield that yeast can be cultivated without producing alcohol at all. The writer's belief is that the septic germs do not cause disease, but the ptomaines or leucomanes which are the result of germ life; and the reason claimed for the fact that death does not take place in all septic cases is that these ptomaines, in sufficient amount, arrest bacterial action. The hope is expressed that septic germs, like yeast germs, may in time be so modified that their disease-producing effect may

be prevented. This has already been done to a certain extent. The paper is one of scientific interest, and contains original thought.

Bromo-Soda.

My attention has been called to your recent preparation entitled bromo-soda. It consists of the bromide of sodium and of the hydrobromate of caffein, in the proportions of thirty to one. It is designed, as I understand, not only to allay nervousness, but by means of the combination of the caffein with the bromide, to counteract the depressing effect of the latter. I have carefully considered the separate and combined effects of these drugs, and can, as I do, heartily commend the preparation you have made and offer for the use of the medical profession. I am thoroughly clear in my mind that the bromide of sodium should be substituted for the more commonly, and, as I may say, almost universally employed bromide of potassium. If you shall be able to exert a favorable influence in effecting this through the manifold channels at your disposal, the change I feel so certain ought to be made, you will confer a boon of no small degree upon nervous invalids.

Dr. J. S. Sewell, Chicago, Ill.

An Anti-Syphilitic and Anti-Rheumatic.

Some years ago a considerable ripple was created in medical circles by the announcement, by Dr. J. Marion Sims, of the remarkable results attained in the treatment of syphilis by a combination of vegetable remedies first used by Dr. McDade at the South. This preparation, known as succus alterans (McDade), is a purely vegetable compound of the preserved juices of stillingia sylvatica, lappa minor, phytolacca decandra, smilax sarsaparilla and xanthoxylum (fraxineum), and has largely displaced mercury and the iodides as anti-syphilitics and as an alterative tonic in the myriad forms of scrofulous disease. Under its use patients develop an appetite and frequently put on flesh rapidly—in these all-important respects differing widely from the effects of mercurialization and iodism, which all too frequently follow the use of the more heroic but less effective alteratives. Succus alterans is also becoming a very popular remedy with the profession and is very extensively prescribed in the treatment of rheumatism, of chronic character especially.

Mass. Med. Journal.

Book Notices.

New Treatment of Chronic Metritis, and Especially of Endometritis with Intra Uterine Chemical Galvano-Cauterizations. By Dr. GEORGES APOSTOLLI, Free Professor of Electro-Therapautics at the Practical School, etc. With Nine Figures. Translated by A. LAPTHORN SMITH. B. A., M. D., Member R. C. S., Eng., Lecturer on Gynæcology in Bishops University, Montreal, Canada. etc. 1888. George S. Davis, Detroit, Mich. 12 mo. Pp. 119. (From Publisher).

The "new treatment" referred to in the title is electrical. Wonderful records are made in this little manual of the curative value of electricity. While the perfection battery has not yet been invented, the author thinks the nearest approach to it is Leclanch's chlorohydrate of ammonia cell. The other instruments which the operator must have are a good galvanometer, an intrauterine platinum sound, a cutaneous electrode of clay and the reophones. Dr. Smith—the Translator—who has witnessed Prof. Apostolli's operations is enthusiastic in their praise, and affirms that his own experience has confirmed that of his illustrious preceptor. The manual before us is precise in its record of details, how to proceed in operations, etc.

Rectal and Anal Surgery, with a Description of the Secret Method of the Itinerants. By EDMUND ANDREWS, M. D., LL. D., Professor of Clinical Surgery in Chicago Medical College; Senior Surgeon to Mercy Hospital, etc., and E. WYLLIS ANDREWS, A. M., M. D., Adjunct Professor Clinical Surgery Chicago Medical College, etc. With Original Illustrations. Chicago, W. T. Keener, 1888. 8 vo. Pp. 111. Cloth $1.25. (From Publisher).

This monograph is on a subject of such general importance as to attract attention, and is written in such a style as to give interest to the reader who begins the book. Its purpose is to give the best methods of diagnosis and treatment of rectal and anal diseases, and to expose the secret methods of the "itinerants," and to estimate their value. The "secret methods" relate mostly to hæmorrhoids, and consist of hypodermic injections, generally of carbolic acid more or less diluted. Other diseases well treated of are abscess and sinus, fistula in ano, fissure or irritable ulcer of rectum, prolapse of rectum, polypus and other benign growths, mechanical obstructions of the rectum, malignant tumors, malformations of the rectum, pruritus ani, mechanical injuries of the rectum, etc. The book is well written, well illustrated and well deserves adoption as a guide book by *practitioners*. We wish the publisher had printed the title on the back of the book, so that as it stands in the library shelf the owner could at once recognize it.

Cyclopædia of Obstetrics and Gynecology. (12 vols., price $16.50.) Volume XII., containing: Diseases of the Tubes, Ligaments, Pelvic Peritoneum and Pelvic Cellular Tissue; Extra-Uterine Pregnancy, by L. BANDL, M. D., Professor of Obstetrics and Gynecology at the University of Prague; and Diseases of the External Female Genitals, Lacerations of the Perineum, by P. ZWEIFEL, M. D., of Erlangen. With one chromo-lithograph and 88 fine wood-engravings. New York: William Wood & Co. 1887. Cloth. 8vo. Pp. 366.

This is the concluding volume of the *Cyclopædia*, and collects the useful odds and ends that have not been fully presented in any of the preceding volumes of the *Cyclopædia of Obstetrics and Gynecology*. It is full of interesting and instructive facts, and the authors have made legitimate deductions and suggestions as to recognitions of diseased or anomalous conditions, as also good advice as to how to deal with them. It is a very useful book.

This *Cyclopædia* of twelve monthly issued volumes makes a complete library on the subjects of obstetrics and diseases of women, as viewed from European standpoints. In many instances the American editor, Dr. Grandin, has added invaluable memoranda and annotations. Messrs. Wm. Wood & Co. deserve great credit for their part of the work as the publishers, and for putting the price for over 4,000 pages at so low a price—$16.50.

Cyclopædia of Obstetrics and Gynecology. (12 vols., price $16.50.) Vol. XI, containing "Sterility; Developmental Anomalies of the Uterus," by P. MULLER, M. D., Professor of Obstetrics and Gynecology at the University of Berne; and, "The Menopause," by E. BROWNE, M. D., Professor of Obstetrics and Gynecology at the University of Graz. With fifty-nine fine wood engravings. New York: William Wood & Co. 1887. Cloth. 8vo. Pp. 383.

The reader feels a little pleasurable surprise as he turns the leaves of the first 197 pages to find so many distinct, lengthy sections given to causes of sterility *in the male* as a part of a *gynæcological* volume. The whole subject in both sexes is well reviewed, both from a diagnostic and therapeautic standpoint. In Part II, pages 180–265, many interesting statements and records are given of curious cases of "developmental anomalies of the uterus," and their consequences. Part III ts taken up with the "menopause," and imparts much information with which practitioners generally should acquaint themselves. The book is readable as imparting much historic knowledge of cases and conditions that we do not know is elsewhere collected in one handbook.

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Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

Medical Examining Board of Virginia.

Our February issue has been delayed as long as we can possibly permit in order to make a report of the disposition by the General Assembly of Virginia of the resolutions recently adopted by the Medical Society of Virginia looking to the amendment of the present law relating to the State Board of Medical Examiners. We regret that final action has not yet been taken.

The joint committees of the Board of Examiners and of the Medical Society of Virginia met, during December, on call, in Richmond, and prepared a bill incorporating all three of the resolutions adopted by the Society, known respectively as the "Moore," "Chancellor" and "Brock" resolutions. The first proposed to do away with examinations by individual Examiners, and requires all parties to be examined to come before the Board in session; the second called for a reduction of the number composing the Board; and the third permitted none but holders of reputable diplomas of graduation in medicine to come before the Board for examination. To meet a suggestion which had not been brought to the attention of the Society, the committee introduced a provision for the examination by a committee of the Board of those few applicants for license who might be prevented by an emergency from attending either of the semi-annual sessions of the Board.

The bill thus prepared was presented in due form to the House of Delegates by Mr. Morton of Orange county, and was referred to a committee of that body. This committee eliminated the propositions contained in the "Chancellor and Brock resolutions," and incorporated the "Moore resolution" with the addition of the suggestion to provide for emergency cases, as just referred to, in the form of a "House bill," and reported it favorably. This bill was passed by the House of Delegates, and the usual motion to reconsider was defeated by over a two-thirds vote. Thus it was sent over to the Senate. The Senate committee, after full consideration of the matter, has just reported favorably to their body on the House bill, without proposing any amendments. And now, as we write, the bill is awaiting its turn on the Senate calendar for consideration. It is believed that it will pass that body, and become a law in a few days. When it becomes a law, Virginia will be able to claim a more perfect law on the subject than any other State in the Union.

In this connection we should mention that, whatever may be the fate of the bill in the Senate, the profession and people of Virginia cannot too highly commend the course adopted by the Faculty of the Medical Department of the University of Virginia in constantly urging the importance and value of the measure, now in the form of a bill, upon the favorable consideration of legislators. Nor should we forget to state for the gratification of the Fellows of the Medical Society of Virginia that such prominent members of that body as Drs. Harvey Black, of Marion, H. Grey Latham, of Lynchburg, Z. J. Walker, of Brownsburg, Herbert M. Nash, of Norfolk, O. B. Finney, of Onancock, E. W. Rowe, of Orange, Hugh T. Nelson, of Charlottesville, L. Ashton, of Falmouth, Wm. L. Robinson, of Danville, R. T. Ellett and Kent Black, of Blacksburg, etc., visited Richmond during the session of the General Assembly and by their sought personal interviews with legislators did much to disabuse their minds of the misunderstandings of facts and the prejudices which had been impressed upon them, in some instances because of maliciousness of purpose, in some because of stupid ignorance, and in some very rare instances because of an honest difference of opinion as to what may be the effect of the law. It is due also to Dr. Geo. Ben. Johnston to say that he has openly expressed opinions favoring examinations of graduates of the Medical College of Virginia by the Board of Medical Examiners, very different

from those expressed by other members of that Faculty before a recent session of the Senate committee, who wanted graduates of that institution exempted from such examinations.

Messrs. Allen & Ginter,

Of this city, the well-known manufacturers of perhaps the best brands of cigarettes on the market, have set an example worthy of adoption by other large manufacturing houses. This firm gives employment to about 600 operatives, a large majority of whom are females. Their factories have been built with an eye to hygienic arrangements for the protection of life and limb in event of fire or accident, and for the preservation of health. About a year ago Messrs. Allen & Ginter entered into a contract with the late Dr. Otis F. Manson to give professional attention to such operatives as might need his services either at the factory or at their homes. Suitable contracts were made also with pharmacists to furnish such medicines, etc., as the Doctor might prescribe. The value of this great benefaction soon became appreciated. In the selection of Dr. Manson, Messrs. Allen & Ginter chose one of the most worthily eminent regular practitioners in this city, and one who had long since established a broad reputation as a Professor in the Medical College of Virginia, and as an author of many valuable contributions, especially in regard to malarial diseases. When Dr. Manson died, the proprietors at once contracted with Drs. O. A. Crenshaw and E. T. Robinson—each an ex-President of the Richmond Academy of Medicine—to fill the vacancy. In their appointment as the successors of Dr. Manson, Messrs. Allen & Ginter manifested excellent judgment and showed high esteem for professional merit. The employees are to be congratulated that, in their untimely loss of the services of so eminent and competent a practitioner as Dr. Manson, they have had appointed to them Doctors of such recognized standing in the community and in the profession of this State.

Virginia Board of Medical Examiners' Statement before Legislative Committee, January, 1888.

"For years State and National Medical Associations have been striving for a reform in medical education. The graduates of medical colleges in many instances have been poorly prepared to practise their profession, and very often have evinced the greatest ignorance. The repeated appeals of

the profession to the medical colleges for better teaching, and a higher standard for their graduates have been answered in many instances; but many schools and colleges still send out men who are ignorant of the first principles of their calling. To correct this and other evils to be mentioned, a large number of the States have organized Medical Examining Boards, made up of men not connected with colleges. For fifteen years North Carolina has had a Medical Examining Board in successful operation, and the profes sion and public generally recognize the great improvement in the education and ability of its medical practitioners. Alabama is also one of the States in the South which has taken the lead in this matter. The Virginia law is framed after the law in Alabama. New York, New Jersey, Ohio, Illinois, Indiana and a majority of the rest of the States have appointed Medical Examining Boards, which are in success ful operation, and the whole profession agree in the great good that has been accomplished. The graduates in medicine are better prepared, better educated, and better fitted for the responsible work before them. Already one advantage of the Medical Examining Board is seen in Virginia: the schools in the neighboring States, to which many of the students from Virginia go for their education, have raised their standard and refused to graduate men unless they believe they can pass the Virginia Board. Communities are thus benefitted and protected; for the better prepared to practise his profession a man is, the better for the people among whom he lives.

While some of the schools of medicine have raised their standard in obedience to the demand of the profession, a very large number have refused to do so. There are so many of these schools, and the competition is so great that every expedient is used to secure a large class. To such an extent has this been carried that in cities where there are two or more colleges sometimes a representative from each meets the student at the railroad station, like porters from hotels, to explain to the newly-arrived student the merits of his school. While competition may contribute to the life of trade, competition in medical schools for a large class certainly does not contribute to the life of an individual entrusted to graduates of these schools. The larger the class of students and graduates, the bigger the fees to the Professor, the greater the eclat and prominence of the men who constitute that school, in the eyes of the public—so say the Professors. And the student often says, "I will go where I

can graduate most easily and certainly; I'll not run the risk of rejection in a high-standard school; I'll study after I get back home, when I begin to practise—killing some people it is true while I am doing it, but I will be making money the sooner."

Now the State Board of Examiners, selected from among the best men in the State, knows no graduate, college or school; has nothing to do with the numbers of classes or fees, acts only for the best interests of the public and the profession, and asks no reward except the consciousness of a duty well performed. There are in this country and State, medical schools which are notable and honorable exceptions to those just described; and when the classes are large it is because of the honor which is attached to their diploma. The number of these colleges is increasing, and nothing has contributed so much to them as the Medical Examining Boards of the various States.

In Philadelphia, New York and Boston, at various times, houses for selling bogus diplomas have been established, and any man anywhere could buy a diploma to practise medicine at from five to fifteen dollars. Recently, at Clifton Forge, in this State, one of these agents from New York was offering to sell diplomas for a small sum of money. Does not the Legislature owe it to the people to protect them, as they can do by the Medical Board, from these impostors and harpies?

Who oppose the Virginia Examining Board? Not the Faculties of the two institutions owned by the State of Virginia, for both of these schools have formally endorsed the Board and assisted in its appointment. The opposition comes from colleges whose Faculties are afraid to have their work inspected—men who have slurred over their course or have been incompetent to perform it. It comes from graduates of those colleges who, in the easy and hurried way in which they have been "pushed through," recognize their inability to stand the honest examination required. And it comes from the personal friends of these men. They say the law is faulty, its execution imperfect, its officers not well chosen. Granted, for the sake of argument only. Will you abolish every law for such causes? If so, we will have no law.

We say that both Colleges of Virginia endorse this law, and we believe that both Faculties are now in favor of its enforcement. It is certainly to the interest of both to do so. And the petition of the students of the Virginia Medical Col-

lege was not the action of the Faculty of that institution. It is not necessary for the Faculty to disclaim it. To endorse it would be an admission of weakness on their part, of incompetency, or a wilful neglect of the work they have been appointed to do, of an inability or an unwillingness to fairly cope with other schools—in fact, a plain bid to lazy and unprepared students to seek a low-graded school. It was the natural desire on the part of the young men to escape an ordeal which, if properly regarded, should have made them court it, for the sake of the College which sent them forth —for the sake of the public, and the noble calling they have selected. The idea that the Faculty has put in that petition is, of course, false. This petition contains some mistakes, which we take the trouble to correct.

1. The statement in the first section of their petition, saying that the students pay more for their tuition in the Medical College of Virginia, is not true. (See fees required of students at the Universities of Maryland, Pennsylvania, New York, and elsewhere.)

2. The statement that there is some antagonism on the part of the Board to the Medical College of Virginia is absolutely unwarranted. When the Board examines a student, he is only known to them by a number assigned to him. The name of the student, or where he graduates, is not known.

3. The statement with regard to the law on this subject in New York, etc., is only partly true, and, as stated, is calculated to mislead.

4. The statement that the State Board was "selected at random" is not in accordance with facts. The Board was carefully selected by the Medical Society of Virginia, an organization representing nearly one-half of the physicians in the State.

5. The statement in section 5 of the petition, in which the practice of medicine is said to be a *trade*, etc., shows a poor appreciation of the dignity of their calling, and is only an additional evidence of the necessity for a higher grade of medical education, for which the whole profession is striving.

6 and 7. The plea of poverty on their part, and the expense of examination, etc., is simply a blind. The Board meets directly after the Colleges close. The fee to the Board is $5. The cost for boarding at the houses where students generally stay is probably for three days about $3.

8, 9 and 10. These sections are answered by the questions and answers appended to this paper, which show more than

anything else how grossly ignorant many of the graduates are, and what a fearful need there is to protect communities from men who hold diplomas, but are pitifully incompetent to take care of helpless sick and suffering people. [As we have quoted most of the answers given in the circular in in the editorial above, (see p. 831); we economize space by omitting them here.—EDITOR.]

We beg leave to add a plea for the Amendment proposed, which is to make the applicant appear before the Board, and not any three individual members of the Board. In case of sickness, or, in the opinion of the President of the Board, for other good cause, when an applicant has been unable to appear, he may be permitted to come before three members of the Board, to be selected by the President.

In the first place the practical working of the law has demonstrated that in many instances applicants for permission to practice medicine do not confine themselves to their district boards, but go about to different members of the board, as their individual fancies may dictate, and incur as much if not more loss of time and money than they would do by attending regular sessions of the board; these sessions are so arranged as to time and place, that graduates coming to Virginia from the different medical schools of this and other States, can present themselves on their way home at a minimum loss of time and money. Individual examining cannot do justice to applicants: First, the applicant comes to the member of the board in the country as a guest and with a story of poverty, with parents and sisters dependent on his passing this examination, and there is not a member of he board who can be altogether deaf to such appeals. Entertaining this guest for three or more days, is not always agreeable or convenient to the country examiner. Second, the examiners cannot maintain a suitable watch over applicants, as has, unfortunately, on more than one occasion been proven necessary. The applicant writes out his answers to the questions proposed in the office of the Examiner, where he has to contend with the temptation offered by well-filled book cases and a table full of medical literature of most recent dates; and though regretting the necessity for such a charge, it has often been found that the temptation has been yielded to. Then again some five hundred physicians of this State have petitioned the Legislature to retain the medical law upon the statute books, and to render it more effective by amending it as above.

Surely our law makers will not lend a deaf ear to such a

number of petitioners, nor can there be any doubt that the law and its amendment would pass, by a large popular vote in the entire State, if it were properly and fully explained to the citizens.

[Signed] H. GRAY LATHAM, M. D.,
HUGH T. NELSON, *Sec'y.* *Pres. Va. State Board Med. Ex.*

P. S.—This paper was read by representatives of the Board of Examiners, to a committee of the House, Jan. 11th, 1888.

A majority of the members of the Faculty, and a number of the students of the Va. Medical College were present, and addressed the committee. We regret to say that the Faculty, while expressing their belief in the value of Examining Boards in the abstract, were very warmly opposed to any examination of their students, and their speeches amounted to an earnest protest to the Board, and in favor of the bill which has been presented for its abolition.

We know that the individual members of the Board, a large number of whom are graduates of the Va. Medical College, have the kindest feelings for the Faculty, and if the Va. Medical College has been referred to so often in this paper, it is because of the strange attitude assumed by this Faculty, it being the only organized body—we can with truth say, the only medical men in the State—opposed to the Medical Examining Board.

"This explanation seems demanded."

Scheffer's Saccharated Pepsin.

We are reminded by a scrap in one of our Western exchanges of a fact we have often intended saying, because it is true: "Emil Scheffer, of Louisville, Ky., is the original discoverer of the manner of securing pepsin from the hog's stomach, and purifying it. His make of pepsin has been on the market over fifteen years; it never disappoints, is always reliable, and while he does not say it himself, yet it can be honestly said that 'Scheffer's pepsin' is far superior to any of the 'patented' pepsins, so-called, now being pushed."

Dr. Thomas F. Wood,

Of Wilmington, the Senior Editor of that excellent standard, the *North Carolina Medical Journal*, we are delighted to announce is able to return to his indoor and outdoor professional work with daily increasing strength and with renewed zest. He writes that he "seldom has any reminder that he is the owner of an aortic aneurysm." He has been

confined to his room and bed most of two years; but has improved this opportunity in posting himself with medical literature and study. Our best wishes attend him and his "first-class" *Journal.*

Remove Import Duties from Medical and Surgical Instruments and Appliances.

We have received from Dr. J. C. LeHardy, Corresponding Secretary Georgia Medical Society, Savannah, Ga., a petition of his Society on the above subject that we very cheerfully approve, and publish in part in the hope of enlisting active interest in the matter at once. The object is to remove the import duties so that medical and surgical instruments, as well as those used in diagnosis and treatment of disease, may be furnished at the lowest possible price. This matter is of great interest especially to country practitioners. We quote a few sentences from the circular sent us, so as to let the reader realize the extent of the grievance and the justice of the plea for co-operative petitions to Congressmen to act in the matter:

"(1) Physicians are at the mercy of instrument makers in regard to price, make and quality of finish, because of the lack of sufficient competition. (2.) The price of instruments made in this country is out of proportion to that paid for similar instruments on the Continent of Europe. (3.) Surgical instruments and appliances are so costly that but few doctors entering the profession can provide themselves with an outfit adequate to carry on a general practice. At present prices it is impossible for a country physician's income to sustain his investing in costly instruments and as a result many simple cases, such as retention of urine, foreign bodies in nose or throat, deep seated-abscesses, etc., all of which could be relieved at once with the proper instruments, must either die from the immediate cause or from the effects of time lost in seeking skillful manipulation, or else they are frequently crippled and disfigured, because the most intelligent help though patiently given is itself crippled for want of proper instruments. (4.) The cheaper grades of instruments are either antiquated or so poorly made that they may prove a cause of failure in operations, sapping, as it were, the natural inclinations to surgery in its inception. (4.) European instruments are from 25 to 75 per cent. cheaper than ours and their introduction into the market will enable the doctors to buy those of prime necessity, will bring down the price of home-made appliances

and oblige the makers to use good material and put a better finish to their work. (6.) The removal of import duties on surgical and other instruments used by the profession and on medicines in general, will produce the same results as we all know it did on the article of quinine."

Clinical Atlas of Venereal and Skin Diseases.

By Robert W. Taylor, A. M., M. D., Surgeon to Department of Skin Diseases of the New York Hospital, etc., is announced to be in progress of publication by Messrs. Lea Brothers & Co., of Philadelphia, Pa. A better author could not have been selected. The fact that this house has taken hold of this publication is a guarantee of excellent execution and the issue of an altogether authoritative work. It is to be issued in eight very handsome imperial folio parts with 58 full-page chromo-lithographic plates containing 191 figures from original paintings and well selected works, etc. Clinical notes of differential diagnosis, therapeutics, etc., will fill the pages allotted to text. Parts I. and II. will shortly be ready and the remainder will follow at brief intervals. Price for the work $20—in four payments of $5 each on delivery of each two parts. As the work is sold only by subscription, our readers should send in their subscriptions at once. Specimen plate will be sent post paid on receipt of ten cents in stamps.

Memphis Medical Monthly

Is the changed name of our valued exchange heretofore known as the "Mississippi Valley Medical Monthly." Drs. Sim & Neeley will continue as Editors.

The New York Polyclinic,

Advertised on page 5 in front of reading matter we are glad to learn, is meeting with eminent success, as a school of clinical medicine and surgery *for practitioners.* Several of our subscribers from this and other Southern States are attending courses of instruction there, and each of them write us in terms of highest praise of the system and execution of the plans of instruction.

The New York Journal Visiting List and Complete Pocket Account Book,

Prepared by Dr. Charles H. Shears, has just been issued by Messrs. D. Appleton & Co., New York. Price $1.25. It is of convenient size for the pocket, and is based upon an

entirely new plan. Each page is arranged for accounts of three patients to the number of 31 visits each for a current month, or may extend over a number of months. It is provided with an index, and has a number of excellent tables, such as doses, poisons and antidotes, table of eruptive fevers, etc. The book has a tuck flap and pencil, and a page of explanations in the pocket. Although at first sight the system may appear a little complicated, it is easy to understand and possesses a number of advantages.

The National Druggist, of St. Louis, Mo.

Is to be congratulated in having secured the services of Frank L. James, Ph. D., M. D., as Editor. He remains also Editor of the *Medical and Surgical Journal*, of the same city. Dr. Sames is a fluent writer and an able writer, and his influence added to that which the *National Druggist* had already secured will make it a still more useful journal.

Dr. Robert Battey,

Of Rome, Ga., "is off on his usual winter vacation, going this year to California." So says the *Atlanta Medical and Surgical Journal*, Jan., 1888.

Dr. I. S. Stone,

Of Lincoln, Loudoun Co., Va., sails from New York city on 11th instant for Europe. During his three months' trip, he will visit some of the prominent medical centres of the Continent, and we hope our readers will hear from him several times.

Baylor's Syrup of Tolu.

Dr. W. L. Baylor, corner of Cary and Reservoir Streets, of Richmond, Va., has sent us a palatable and beautiful specimen of syrup of tolu, which was made at his pharmacy, by substituting nice drop chalk, for the carbonate of magnesia usually made use of in the manufacture of the above syrup, and without the objection to the magnesia. It is cordially recommended to all druggists who make their own syrups.

Comparative Test of Pepsines.

We were greatly interested a few days ago in examining a photograph shown us by Dr. James Carr—the popular and capable travelling representative of Messrs. Fairchild

Brothers & Foster, of New York city. Four different specimens of pepsine of different houses of repute were tested by two of the most capable and trustworthy of our city pharmacists, both of whom are widely known among doctors throughout this and some of the adjoining States—Mr. T. Roberts Baker and Mr. Hugh Blair—and the comparative results of the digestive powers of each was photographed. We were surprised to see the great degree of superiority over others that was represented in the photograph of the result of the experiment with Messrs. Fairchild Brothers & Foster's pepsine. We always knew it was excellent, but now we find it to be better than we thought it was. Any doctor or druggist who wishes one of these photos can obtain a copy by applying to Messrs. Fairchild Bros. & Foster.

Obituary Record.

Dr. Otis Frederic Manson

Died at his home in Richmond city on February 1st, 1888, after a brief illness, in his sixty-sixth year of his age. In our March No., we will give a sketch of his eminent life. In the meantime we append resolutions adopted at a meeting of the physicians of Richmond in the Hall of the Richmond Medical and Surgical Society February 2nd:—

Whereas in the Providence of God, our friend and colleague, Dr. Otis F. Manson has been called by death from our midst, we, the members of the Richmond Medical and Surgical Society and profession of the city, assembled to pay the last tribute to his memory and worth, do hereby recommend that it be,

Resolved, That our Society has lost one of its ablest associates and the profession one of its most learned members.

Resolved, That we express our deep sympathy to the bereaved family and that we attend the funeral in a body.

Resolved, That a copy of these resolutions be sent to the family, this record be spread upon the minutes of the Society, and published in the city daily papers and each of the Medical Journals published in the city of Richmond.

LANDON B. EDWARDS, M. D.
M. A. RUST, M. D.
M. D. HOGE, JR., M. D.

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Original Communications.

Art. I.—Insomnia. By J. EDWARD GREEN, M. D., Brooklyn, N. Y.

One of the most distressing derangements of the nervous system now occupying the attention of neurologists and the profession at large, and which is fast threatening to become a national ailment, is the inability of the brain and body to sleep when such rest is most required. This trouble is taxing to the utmost the skill of the medical profession in the attempt to alleviate or remove. Every specialist in diseases of the nervous system is besought incessantly by his patients to relieve their aching brains for a short time only from the mere act of thought and restore to them the faculty of sleep. The attempt, so far, to respond to such appeals has been futile or worse, and the trouble frequently culminates in dementia or cerebral softening.

Etiology.—"Blessed is the man who invented sleep," exclaimed Sancho Panza; but it seems as if the American people were doing their utmost to abolish nature's divinest heritage. It is amusing to witness a merchant, stock-broker or popular preacher, after having pushed his nervous energy to the furthest limits of its endurance, fly off to Europe at a

moment's notice, at the advice of his family physician, and tear through the Continent at break-neck speed as if the devil were at his heels. He dashes from town to town, climbs Alpine mountains, and rises early to make the best of to-day, when he had better be in bed a few hours longer to fix the benefits of yesterday. At the close of this pleasure(?) excursion he expects to find himself entirely recuperated, when he is more frequently driven to bed to recover from his holiday exertions. The more I contemplate the furious rush and excitement of the metropolis, and the high tension to which our people are subjected, the more am I impressed with the idea that we are farther than ever from a proper understanding of the true *ars vivende.*

We Americans live too fast, too high, and feel far too acutely for a sound condition of the organism. "That pleasure that verges on pain" seems to be the only variety of enjoyment that holds out any allurements to the American taste. How far yet is a vast majority of intelligent people even from understanding the physiological laws which govern their own system? When we impose a greater amount of exertion upon our arm, for instance, than it is capable of bearing, muscular paralysis ensues; when the whole body is overtaxed, the heart protests; and, lastly, when the brain is stimulated beyond its powers, it asserts itself by refusing to subside into quiescence at the time when nature and habit have prescribed. It seems to be the object of the American people to compress every emotion and excitation the human brain and body is capable of experiencing in a few short minutes analogous to the sexual orgasm. See a man dash from the counting-house to the theatre, thence to a midnight banquet, from there to a dozen or more saloons, and finally spend the last atom of energy in the arms of a courtezan. Imagine the feelings of such an individual when day begins to dawn and business calls him to his post. The energy of our extraordinary civilization seems to have sought out every nerve in the organism and goaded it to the utmost stretch of its function either for pleasure or for pain, forgetting that when we spend the vital energy with too lavish a hand, nature demands a corresponding restitution; in pro-

portion to a supreme exaltation, there must succeed a supreme despair. In such states, when there is no rally, blank annihilation seems to be the only refuge from the agony of thought.

The religious frenzy of the fifteenth and sixteenth centuries, as faith in the supernatural began to wane, has been succeeded by miracles of commercial enterprise. The wonderful fusion of all elements and all peoples in the crucible of American activity has created a feverish energy that seems superhuman. Witness the marvellous lengths to which the use of electricity has been pushed. The subtle rapidity with which this force works is analogous to our own morbid restlessness.

The speculative character of most American business enterprises, and the tormenting anxiety this necessarily entails, is one of the prime factors of the endless neuroses of which our great nation is beginning louder and louder to complain. Conditions are now attained in America never before realized. Here there are no grooves, no traditions, no trammels of form and custom to fetter and hamper the limitless expansion of thought and action, and the absolute completeness with which such restraints have been withdrawn has caused an explosion of nervous force, so to speak, in all directions. That delightful sense of *bien être*—that exquisite calm and supreme repose—characteristic of the old world, is quite unknown to us. I disclaim the role of the alarmist, but I wish to record my earnest protest against the present great evil of our social system, fast tending to an abyss of paralyzed energy. Neuroses multiply on every hand, and our glorious civilization is threatened with serious peril and possible extinction if the mad whirl is pushed to its ultimate results. Better a thousand times to have fewer marvels of enterprise, and thus to possess a sounder nervous organism to transmit to posterity!

Symptomatology.—One of the most distressing conditions attending loss of sleep is a state resembling that of the coma-vigil, when the individual, only partially under the dormitive impulse, and yet not in the realm of dreams, recounts to himself, as it were, with ceaseless iteration the happenings

and occurrences of the day, and, more maddening still, when the brain occupies itself with a rehearsal of all the petty annoyances and vexations of months and years past. These are presented to the sensorium in such startling and vivid colors, and stand out in such bold relief, as to excite emotions altogether out of proportion to the triviality of the original causes. It seems as if these sinister phantoms, buried in complete oblivion during the waking moments, as soon as the unhappy mortal seeks a short repose, emerge in swarms from the gloomy caverns of the brain and so unrelentingly inflict their stings that rest becomes impossible. The faculty of "losing one's self," in common parlance, seems to be entirely gone.

When insomnia first sets in, the utter sense of crush, despondency and depression of such a person, arising from bed in the morning, passes all description. The external world in all its phases appears stale, flat and unprofitable, and the very soul seems to wilt and shrivel within itself at the idea of undertaking the business of the day. Well might such an individual exclaim—

> "I would not, if I could, be blest;
> I want no paradise but rest."

The *appetite* next begins to fail, its irregularities being particularly noticeable. At times the patient scarcely tastes food, and then, falling to with voracity, will gorge himself to distension. A vague sense of uneasiness and *distress in the centre of the abdomen* is invariably present, and never fails to elicit from the sufferer eloquent and unending complaints. The *auditory hyperæsthesia* is exceeding great, and precludes an approach to calm when noises even of a trifling character are present. Many authors speak of *thirstlessness*, or lack of a healthy sense of thirst, occurring at proper intervals, as well as anorexia, before referred to. In fact, that sense of actual enjoyment attending, in a healthy condition, a proper performance of the functions is conspicuously absent. The operations of urination, defecation, eating, drinking, bodily exertion and exercise of the mind are performed in a mechanical and perfunctory manner and are an irksome task at the best. The mere *plaisir d' être*, or pleasant consciousness

of existence, is a thing unknown to victims of loss of sleep, and the air of utter insipidity which life and the external world assumes is a form of suffering often of the most acute character.

Lack of tonicity in the *voice* and a wavering uncertainty in its tones I have observed in some cases, especially after broken rest for several nights in succession. As the trouble progresses unrelieved, the teeth become extremely sensitive. A singular *variation of temperature* prevails in different parts of the body, owing to defective innervation—one hand or foot, for instance, being extremely cold while its fellow is uncomfortably warm. This uneven, irregular functioning of the nerves, and the unceasing fret and worry entailed by these causes acting and reacting on each other, finally creates a frightful irritability of temper and feeling which, save to the unhappy sufferers themselves, is past all understanding. At this unhappy juncture Americans rival the Chinese, according to Father Huc, in the reckless *insouciance* with which they rush on to suicide. What more potent voucher, I ask, for the entire exhaustion of the *vis nervosa?*

It will be useless to catalogue further the manifestations of disordered nerve force. Nervous irritability has been well called "insanity of the nerves," and it has as many vagaries almost as insanity of the brain.

In discussing the *treatment* of this troublesome condition, I wish to take a new departure, and advocate *none;* for when we begin to treat an ailment of this nature it seems only an encouragement of the vicious causes whence it proceeds. All internal medicaments I consider absolutely worthless; for what is there in the whole *armamentarium* of physic that can, by any possible assimilative process, directly repair the ravages of shattered nerves and infuse new life and vigor into the nerve-cells themselves? It seems to be the idea with the manufacturers of certain patent medicines that they can build up worn-out nerve-tissue by feeding phosphorus, in large or small quantities, into the stomach as a brickmason would insert stones into a wall! But the idea is preposterous.

All that a medical man is warranted in attempting is to

arrest the disastrous process and call a halt to the frantic race. Nature, if allowed to proceed undisturbed, has a sufficient *vis reparandi* to gradually restore her functions to their wonted tone. Rest is the great desideratum; let that be first attained.

Unfortunately, it is hard to study these cases uncomplicated by alcoholic indulgence; for as soon as the patient begins to feel his powers of endurance fail he resorts to artificial supports.

Dr. Hammond advises a lump of ice to be held to the nape of the neck one minute each night just before retiring. This undoubtedly produces drowsiness, and is desirable when there is marked hyperæmia; but insomnia being just as often due to anæmia of the cerebral hemispheres, this treatment must not be indiscriminately applied.

With regard to simple external adjuncts, leaving internal medication out of the question, I advocate most highly surf bathing and massage—the former far surpassing anything I know of in restoring a sense of lightness and exhilaration to a frame in which the nervous force is greatly depressed.

Against electricity, in all its forms, I urge my most emphatic protest. It is a stimulant of the most powerful order, and to apply it to a subject already reduced to a critical condition by over-stimulation seems to me to be absolutely suicidal. Something diverting, in the true sense of the word, is desirable at this time—something to carry the thoughts and feelings in an entirely different channel, and to restrain as much as possible from introspection and retrospection.

In this connection, when the hour for rest arrives, let the patient remember that somnolence may frequently be induced by strategem when it refuses to be controlled by strength of will. In short, if we would moderate our hurry and lessen our worry, many nervous ailments now rampant in the country would be abolished.

Lastly, I would say, *interdict absolutely all sexual excitement*. This form of erethism in such a state is more pernicious and a more complete barrier to permanent restoration than the whole catalogue of other causes combined. By such indulgences the nervous energy is sapped at the very springs,

and all hopes of a restorative process set beyond the realms of possibility. Always bear in mind, in following out the treatment, the truth of the old adage: *Cessante causa, cessat effectus.*

ART. II.—**Buffalo Lithia Water in the Treatment of Chronic Bright's Disease of the Kidneys.** By M. M. JORDAN, M. D., Boydton, Va.

Three years ago, without having been previously sensible of impaired strength, or of any deterioration of health, I found myself suffering from Bright's disease of the kidneys. My attention was first directed to the existence of renal trouble by dropsy making its appearance as œdema of the face, particularly around the eyes, and simultaneously in the lower extremities. Examination showed that the urine contained two and a half per cent. of *albumen.* There was a heavy sediment, and *casts* and *urates* were deposited in abundance. This state of things was soon followed by *uræmic poisoning*, manifested by *coma* and delirium, and I was confined for many months to my bed, everything pointing to a fatal termination.

Other treatment failing of any permanent good results, I was in this condition put upon Buffalo Lithia Water, Spring No. 2, the good effects of which were soon apparent in a notable diminution of the *albumen*, a partial disappearance of the dropsy, and a gradual subsidence of the *coma* and *delirium.* Under the continued use of the water, there was slow but constant improvement in my condition, until I was so far restored as to be able again to enter actively upon the practice of my profession, in which I have now been engaged for some two years, without any interruption of moment on account of my health. There has been, occasionally, some manifestation of unpleasant symptoms, but I have found them promptly disappear under the influence of the water.

With this experience, I cannot do less than commend this water to the profession, as worthy of trial in other similar cases.

Art. III.—Reversed Peristalsis—Contributions to Gynecology.*

By E. CUTTER, M. D., LL. D., New York, N. Y.

"*Reversed peristalsis* is the cause of many trials with our race, specially during labor." This dictum made by a modern worker is worthy of Hippocrates. We know what normal peristalsis is—*i. e.*, the natural vermicular movements of the alimentary canal from the mouth to the anus and from the fundus of a gravid uterus to the os in normal labor. *Reversed peristalsis* means an unnatural vermicular movement backwards from the anus to the mouth of the alimentary canal and from the os to the fundus of the uterus at full term. It is possible these have not been connected ere this; still it is high time that the connection was realized. And as food in motherhood is under consideration it is quite right to trace here its connection at the risk of repetition.

As this is a practical work the argument may best be enforced by living examples which serve the double purpose of proving the point and being history at the same time.

Mrs.——, a middle aged lady, residing in the city of ——, had had four or five children. The labors were so severe, protracted, awful and dangerous that after the birth of the last child, four physicians consulted and unanimously advised her never to have another child, as it was madness to run such risks of losing her own life. The chief trouble lay in the inefficient and painful contractions of the uterus —beginning at the os and running up to the fundus (reversed peristalsis). Besides, she had rheumatism with gravel. The enlarged fibrine filaments in the blood—the thrombi and emboli of fibrine and crystals—blocked up the blood vessels. Her stomach was irritable; vomiting frequent, nausea; bowels constipated; heart weak and over-loaded with work; dyspepsia and indigestion; mal-assimilation, etc.

It so happened that her husband was under Dr. Salisbury's care about this time for chronic disease, and the matter of the consultation of physicians was brought to his notice. He was asked if there was not anything he could do for the rheumatism. He said, "Yes," and she went on treatment, which included hot water and beef with alteratives and eliminating medicines for the gravel and fibrine filaments. The result was that she regained her health.

*Extract from *Food in Motherhood.* By E. Cutter, M. D., LL. D.

The morphology of the blood became normal. She became pregnant, and had no nausea or disturbance of the alimentary canal whatever, and at full term was delivered of a healthy child ere any medical assistance arrived. She had plenty of breast milk. Her labor was almost painless.

Of course such speedy labors are not desirable, but the case illustrates the point which was thoroughly made out in this case.

In another family were two child-bearing women, who were in the habit of having hard labors. In both these ladies, by establishing the normal peristalsis of the alimentary canal, normal peristalsis was also established in the uterus, and normal and easy labor followed with healthy offspring and lactation.

Natural feeding, or feeding according to the rules of nature, will ensure natural labors, other things being equal. Does the æsthetic pleasure of eating food that reverses the normal peristalsis, that produces nausea, that causes indigestion, ropy adhesive red blood corpuscles, blood crystals, thrombi and emboli, reversed peristalsis of the uterus with protracted, inefficient, useless, weary, sometimes child-killing pains or contractions—is this food pleasure, I say, to out-weigh the pleasures and advantages of healthy blood, normal downward peristalsis of the alimentary canal and the uterus, a normal easy labor, a healthy offspring with strong constitution, a household rejoicing with exceeding great joy because a new individual has come to be loved, to love and to add to the domestic happiness?

These things are worth thought. If the mother will live by the rule here enforced (*i. e.*, two-thirds animal food, and one-third vegetable food), these results can be secured as the experience of others and myself have shown.

1730 *Broadway.*

"I used TONGALINE for a patient who had suffered with neuralgia for over a year, and in that time had tried almost all the remedies recommended for that complaint. The pain left after taking the second dose, and he was thoroughly cured before he had taken two ounces.—S. W. KELLER, M. D., Mahoning, Armstong Co., Pa.

ART. IV.—**Self-Retaining Palate Retractor.** By JOSEPH A. WHITE, A. M., M. D., Senior Surgeon to the Richmond (Va) Eye, Ear and Throat Infirmary, etc.

After some months of experimentation, I beg leave to submit to the profession the useful instrument represented in the accompanying cuts.

The principle of its construction is so very simple, that it is strange that we have not had such an appliance long back. It is made by Mr. Charles Willms, 224 N. Howard street, Baltimore, Md., who perfected it for me about the middle of December, 1887. Since then I have used it so

Fig. 1.

Fig. 2.

frequently, and with such satisfaction, both for the examination of the post nasal cavity and for various operations therein, such as removal of adenoid tissue, snaring lower turbinated hypertrophies, and galvano-cauterizations, that I now consider it an invaluable addition to the rhinologist's armamentarium. For a long time back I had used, to draw the palate forward for examination, a simple loop of silver wire, with a short rubber band which caught between the teeth when practicable, or with two long rubber loops which hooked over the ears, as less uncomfortable than passing a piece of rubber tubing through the nostrils out of the mouth, and tying it over the upper lip.

The latter method I always used for *operations*, as more reliable, and less likely to become displaced than the former. The present instrument, however, does away with both methods, and is infinitely preferable to either.

It is made of a square steel bar about 3 mm. thick, terminating in a loop of pure silver wire heavy enough to hold the palate and light enough to be readily changed in shape by the fingers to suit each individual case, being made smaller for children and larger for a more capacious pharynx.

On the bar slides the attachment which clamps over the upper lip and holds the retractor in position. This sliding attachment, with two arms, requires no fixation to keep it in position, the tension being alone sufficient to make it immoveable on the square bar. For greater security, however, in performing an operation, a small fixation screw is attached to the side of the slide to fasten it securely, so that facial contortions must not displace it.

As shown in the plates, I had two attachments made at first, one with two steel wire arms terminating in silver wire loops (Fig. 1), the ends of which caught in the nostrils; or on either side of the alæ of the nose, and another attachment terminating in two hard rubber buttons (Fig. 2), which caught in the depressions over the alveolar processes on the same principle as a similar instrument described in the *Medical Record*, of January 14, 1881, by Dr. Porcher, of Charleston.

The reason of the two attachments was that I found in some cases one suited, and in others the second attachment was preferable. Since the plates were made, about January 1, I find the one with silver loops answers both purposes, as it can be moulded by the fingers to suit any case, just as the terminal loop of the bar which catches the palate.

There is but one objection to urge against the instrument, and that is, that the bar may get in the way of operating in the right nostril, but this does not hold good if the operator is ambidextrous, and moreover it is so small that it is not much of an obstruction. It is applied and removed so rapidly that it can be taken away repeatedly in performing operation to rest the patient or the surgeon. My experience already has demonstrated its great advantages over any known method for working in the post-nasal cavity, and I am satisfied any of my confrères who give it a trial will agree with me.

This instrument was exhibited before the Richmond Medical and Surgical Society February 2d, 1888, and its description published in the *Journal of the American Medical Association* February 25th, 1888. It is now republished because of the improvement made since then, the cut (Fig. 3) and description of which are here appended.

Further experimentation with the instrument described in the *Journal of American Medical Association* showed the author that the bar was rather long. Hence it has been shortened at least one inch. Moreover, as above stated, objection might be found to the projection of the bar in front as an interference both with seeing and with operative procedures. A joint has been made in the bar so as to turn the projecting end upwards at any desired angle as indicated in the cut (Fig. 3.) So far as my experience has gone with this improved self-retaining palate retractor, it meets every indication that could be supplied by an instrument. When the end is bent upwards, as shown in Figure 3, there is practically no forward projection of the handle or stem in front of the mouth to interfere with or embarrass the manipulations of the operator—whether he be right or left-handed or ambidextrous.

410 *East Grace Street.*

Clinical Reports.

Case of Chronic Cystitis Cured by Fluid Extract of Pichi.

By RAMON D. GARCIN, M. D., Richmond, Va.

History.—Patient was a white man, æt. 20, with good family history. He had an attack of acute gonorrhœa nine months since. The inflammatory action extended to the bladder, in spite of his physician's treatment. He was relieved of the cystitis at that time, but the gonorrhœal discharge continued in spite of all treatment.

Symptoms.—The usual signs of vesical catarrh were present: Frequent micturition with the passage of only a small quantity of urine, and a dull, aching pain over the vesical region. The urine was alkaline in reaction, and on settling, divided, as so tersely described by Prof. Loomis, "into two parts—a lower, thick, turbid, gelatinous, coherent and opaque mass—the supernanant layer being clear."

Treatment.—The diet was restricted so far as to exclude all stimulating food and any excess of fat. Washing out the bladder could not, for sufficient reasons, be resorted to. As

the beginning of the treatment, the following prescriptions were given:

℞. Tinct. ferri. chlorid.....ʒiss
Tinct. cantharidis.....ʒj
Olei copaibæ.....ʒiss
M. Sig.—Teaspoonful three times a day.

For the gleet:

℞. Zinci sulpho-carbolatis.....gr. x
Ext. hydrastis canadensis (colorless) fld..ʒij
Atropiæ sulphatis.....gr. ij
Aquæ distillatæ.....q. s. ad. ʒiv
M. Sig.—Inject morning and night.

This treatment was persevered in for a sufficient length of time, with only an amelioration of symptoms during the continuance of the remedies.

Dr. Loomis says, in the last edition of his excellent work on *Practice of Medicine*, "I have found more benefit from the daily use (drachm-doses after each meal) of the 'Lafayette mixture' in chronic cystitis than from all other remedies." Having had some experience with this combination in hospital practice, and from its being recommended by such eminent authority, I was induced to give it a trial; but no permanent benefit followed its use.

Other remedies, such as the fluid extract of eucalyptus, belladonna, buchu, *et cætera* were used, but all with signal failure.

As a dernier resort, and with little expectation of benefit, the following were given:

℞. Ext. pichi fld. (Parke, Davis & Co.'s).....ʒij
Sig.—Twenty drops three times daily for three days, then thirty drops *ter die.*

For the gleet, which had never ceased:

℞. Normal liquid ergot (P., D. & Co.'s).....ʒij
Aquæ distillat.....q. s. ad. ʒij
M. Sig.—Inject morning and night.

The patient was to report at the end of a week.

The urine, examined at the end of this time, was a trifle clearer, and the gleet was decidedly lessened in quantity. The pichi was continued in gradually increasing doses, till fifty (50) drops *ter die* were reached, and it was then gradually lessened. The urine, at this time, was clear and cloudless. All treatment was finally stopped, for the purpose of determining whether these effects were merely temporary or permanent.

The patient reported every week, and up to this time

there has not been the slightest return of the symptoms, and I think I can safely say that he is cured.

Case of Acute Yellow Atrophy of the Liver. By J. C. HURST, M. D., Reed Island, Va.

Monday morning, Nov. 14th, 1887, I was summoned to see Mr. French O., æt. 34, who was taken ill on the Friday prior to my visit. I found his temperature 97.5°; pulse 125 per minute; bowels constipated; much nausea; frequent vomiting of mucus and bile, constant hiccough except when sleeping, slight jaundice, yellowish tongue, fragrant odor of breath (so much so that I asked as soon as I entered the room if he had not been taking chloroform), hepatic dullness about natural, severe headache and great mental depression; he believed he was going to die and hence was crying.

Diagnosing gastro-hepato-duodenal catarrh, I prescribed hydrarg. chlorid. mit., gr. j. with sodæ bicarbonat., grs. x, to be repeated every hour until his bowels were evacuated, or until twenty powders were taken, after which he was to take ℥ss of oleum ricini if necessary. Procuring a pint of my patient's urine, I left to return on the following morning. His urine was acid in reaction, specific gravity 1018, and contained a trace of albumen and bile. I diminished the amount of the chlorides and phosphates, with an infinitesimal quantity of urea.

On Tuesday morning, the patient's symptoms somewhat ameliorated save constipation. But he had epistaxis once or twice last night, and he now has marked dilatation of pupils, some confusion of the mind, with indisposition to speak, and extreme restlessness. Prescribed calomel and soda, each grs. x, and jalap grs. xv, to be followed at once with an enema. In two minutes after the enema the bowels acted, bringing a large quantity of fæcal matter, blackened evidently with blood and calomel. I also ordered sodæ phosphatis ʒj every three hours. With these symptoms under consideration I decided to give to his friends and relatives an unfavorable prognosis. I again left to return Wednesday, hoping, but not believing, to find him better.

Wednesday morning temperature 97¾, pulse 120, jaundice increased, vomited matter contained blood, numerous petechiæ over the whole body, bowels had not acted from the administered cathartic, but another enema brought fæces

containing blood; the area of hepatic dulness was diminished to one-half normal size; delirium with extreme restlessness, moving from one position to another, with favorite position on knees and head; refused to speak save when roughly shaken and harshly interrogated, pupils much dilated, odor of breath still fragrant and bowels confined. I gave enema, which emptied the lower bowels and continued sodæ phosphatis. I gave also magnesiæ sulphas, and left to return in the evening.

Wednesday, 2 P. M. Patient comatose. After examination, I bid adieu to return no more, leaving him to pass into the hands of a higher power. He died Wednesday night.

I report this case as having four peculiarities. 1st. The failure of cathartics to move the bowels; 2nd. Uniformly rapid pulse; 3rd. Temperature below normal to the close; 4th. Peculiar fragrant odor of breath.

Original Translations.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Treatment of Consumption with Creosote.

Following up the suggestions made by Sommerbrodt last year, Koch and Cornet have been giving large doses of creosote in phthisis. It was proved, experimentally, by Guttmann that the larger the percentage of creosote in pure culture tubes, the more certainly was the development of the tubercle bacillus prevented. Consequently, when the drug is well tolerated, one-grain capsules are given from three to fifteen times daily. Small doses of one-fifth of a grain, as heretofore prescribed, do no good, and it is besides only a loss of time.—*Berlin Klin. Wochensch.*, 48, 1887. *Rundschau*, Jan. 1st., 1888.

Treatment of Sterility.

Dr. Levy, of Munich, says there is no subject in gynæcological literature upon which so much confusion exists as in the chapter on sterility. In fact, the term itself is not nearly as precise as we could wish, or as important as the subject demands. We read in various books and monograpes of absolute and relative; of temporary, primary and secondary sterility, and the actual time at which the various phases begin. Dr. Levy thinks that such divisions

are arbitrary, and not in accordance with clinical experience. Among the most important etiological features of sterility are: (1) Malposition of the uterus, with or without similar changes of the ovaries and tubes. (2) Pathological changes in the structure of the uterus itself, as stenosis ostii et coli, flexion, version, and parenchymatous degeneration. (3)Catarrhal conditions of the vagina and uterus. (4) *Acute and chronic gonorrhœal endometritis*, the most frequent of all causes. (5) Aspermia; hence it is necessary to examine the man as well as the woman; for it has the additional advantage of intelligent treatment; for then we would not be prescribing for the woman when the man is at fault. (6) Too frequent and violent cohabitation. If menstruation is delayed several days, then intercourse should be strictly forbidden; if not, the flow will come on again after intercourse the next or succeeding days with great regularity. Indeed, many non-conceptions can be attributed to the disregard of this rule. In each case of sterility a macro- and microscopic examination should be made of cervical and vaginal secretions, to see if—1, sperma are present; 2, if they are in the cervix; and 3, if they are associated with normal or pathological elements.

Pajot recommends that in ante-version, urine should not be made for some hours before cohabitation; and in retroversion, prevent evacuation of the bowels for several days previously by artificial means, in order to correct, in a manner, these malpositions of the womb.—*Der Frauenarzt. Rundschau*, Jan. 1st, 1888.

Analyses, Selections, etc.

Dislocation of Shoulder of Long Standing.

Dr. J. McFadden Gaston, of Atlanta, Ga., (*South. Med. Rec.*, Feb., 1888), in a clinical lecture reports this case, in which no immediate effort was made to reduce the dislocation, only a dressing applied by a physician for supposed fracture of the neck of the bone. The following condition now holds: A gap between the upper part of the humerus and the acromion,, with saliency of the point of the latter; atrophy of the deltoid muscle; prominence of the humeral head beneath the coracoid process of the scapula; the head

in front of the axillary artery, and adhesions between the structures; and the glenoid cavity filled up with tissues. The only possible plan for relief is to cut into the cavity, but in this case it is not advisable. Neuralgia is present, but the patient is advised to suffer his present ills rather than undergo an operation. The bone was dislocated two years ago.

Self Castration as a Remedy for Seminal Emissions.

Reported by Dr. K. H. Boland, of Atlanta, Ga. (*South. Med. Rec.*, Feb., 1888). The patient tied a piece of twine around his scrotum in two places, and made the cut with a razor between the ligatures; after which he walked two squares. Almost two ounces of blood were lost. The wound was properly dressed. Three months afterwards the patient stated that he looked better and had gained in flesh, but not much in strength, as he had suffered from malaria.

Progress in Obstetrics and Gynæcology in Germany.

By Dr. E. S. McKee, of Cincinnati, (*South. Med. Rec.*, and *Nashville Jour. Med. and Surg.*, Feb., 1888). Sanger divides *salpingitis* into these forms: Gonorrhœica, tuberculosis, actinomy cotica, septica, and syphilitica. Fritch has found *iodoform gauze* valuable as a palliative of *carcinoma.* Stratz gives the following points in *distinguishing cancer* of the cervix uteri from erosion: The diseased surface is everywhere sharply separated from the sound tissue, nowhere changing gradually from one to the other; a difference in level between the diseased and healthy part is always present; the cancerous portions always have a yellowish tint; the malignant parts show small yellowish-white, glistening raised points, at least in certain places. In excessive *vomiting of pregnancy,* Credé gives every five minutes a teaspoonful of nourishment, preferably iced milk, through a tube, the patient lying absolutely quiet. Chazan reported a case, in which the patient believed that she was pregnant, no abnormality being discoverable. She was etherized and made to believe that the fœtus had been extracted. The vomiting ceased. The result leads Chazan to think that in most cases hyperemesis gravidarum is due to some abnormal condition of the nervous system rather than of the genital organs. "Hands off," is the rule with many German physicians in the *third stage of labor.* Credé inclines to letting the genitals alone during and after labor, unless interference is positively indicated. The diagnosis is made out by external palpa-

tion. *Hypnotism* (syggignocism) *to prevent labor pains*, as introduced by Pritzel, of Vienna, is gaining some favor with those who possess the power. *Antiseptic measures* may be stated thus: For the hands, a $\frac{1}{1000}$ sublimate solution; external genitals, $\frac{1}{2000}$; vaginal or uterus, $\frac{1}{4000}$; the vagina, and especially the uterus, are washed out only on the strongest indications either just after birth or during confinement to bed, the amount used being about two litres; in post partum hæmorrhage from atony a $\frac{1}{3000}$ solution is used; the solution is contra-indicated in anæmia, phthisis, general cachexia, diseases of the kidney and digestive organs, extensive wounds of the vulva, and in those taking mercurials; the $\frac{1}{1000}$ solution is used in the uterus only in severe cases, such as tympanites of the uterus, putrefaction of the fœtus in the uterus, or septic puerperal fever. Not more than one minute's time is allowed for the injection, which is followed by distilled water copiously. After an expulsion of a macerated fœtus a solution of $\frac{4}{1000}$ is used. This is also used in the endometritis following the expulsion of the fœtus in premature delivery, and in puerperal endometritis accompanied by fetid vaginal discharge. Copious injections of water should follow. For instruments, carbolic acid is in general use. Gusserow is not so strict as Olshausen and Martin in the antiseptic precautions enjoined upon visitors to the clinics. In Vienna it is stated that a physician who has been in contact with septic material may attend a labor as soon as he changes his clothes and washes with a reliable antiseptic solution. *Axis traction forceps*, according to Carl Braun, would in many instances deliver living children through deformed pelves, when otherwise craniotomy would be necessary. He frequently uses his own modification of the Simpson forceps, termed tri-form forceps, and thinks that it is applicable to any condition where forceps are needed. A four per cent. *solution of cocaine* to the upper part of the vagina and cervix during dilatation, and to the ostium vaginæ and perineum during the expulsive effort is useful. *Sanger's Cæsarean section* is gaining ground. Gusserow's method of operating is given, and the percentage of success obtained by different operators.

Aneurism.

Dr. Duncan Eve, of Nashville, Tenn. (*South. Prac.*, Feb., 1888) reports the case of a colored female with a tumor just above the popliteal space on the left leg. As some obscurity existed as to the exact nature of the case, the patient was

anæsthetized, and an exploratory incision made, which was followed by a gush of arterial blood. This was controlled by a tourniquet. A ligature was placed around the artery at the lower border of the tumor, and a second one around the femoral at the apex of Scarpa's triangle, as the condition of the diseased vessel just above the tumor did not admit of ligation there. The case was an unusual one—not a real popliteal aneurism, as it occurred too high up. The usual after treatment was adopted.

Modern Therapia.

Dr. S. P. Crawford, of Stockton, Cal., (*South. Prac.*, Feb., 1888), calls attention to the nostrums and to the new preparations now upon the market, and thinks that it is time for a halt to be called, and a proper valuation placed upon our remedies. He is not opposed to therapeutical research, but enters his protest against a modern method of introducing drugs which cannot be distinguished from nostrum-vending.

Etiology of Infections Diseases—Biological Investigations.

In an extract from a paper Dr. Geo. M. Sternburg, U. S. A., President of the American Public Health Association, read before that body at Memphis, Nov. 8–11, 1887, (*South. Prac.*, Feb., 1888), he refers to experiments made by a number of investigators concerning different germs, bacilli, etc., which enter into the etiology of disease. He mentions the discovery by himself in 1881 that virus may be attenuated by exposure to the action of certain chemical agents, and states that the only safe basis for sanitation is an exact knowledge of the infectious agents which cause disease.

Malarial Hæmaturia in an Infant.

Dr. S. W. Sanford, of Henning, Tenn., (*Memphis Med. Monthly*, Feb., 1888) reports the case of a male child, born cyanosed and weighing sixteen and a quarter pounds, which, after doing well for twenty-four hours, had the usual well marked manifestations of malarial hæmaturia. On the eighth day all the symptoms had disappeared. The mother had been treated a few days before confinement for a mild attack of malarial fever, which yielded readily to treatment. The treatment for the child consisted in quinine and small, frequently repeated doses of mercury. This report was made before the Tri-State Medical Association of Mississippi, Arkansas and Tennessee, and was discussed by the body.

President Dunn stated that where there is no intermission,

or clearing up of the urine, a red-pointed, very dry tongue is observed. In such cases he has abandoned quinine, and the patients' recover; but when the urine clears up, and the fever subsides, and distinct paroxysms recur, with high-colored urine, he would expect to fail in treatment without quinine used liberally.

Dr. Prewitt has always found in true hæmaturia continuous bloody urine from the beginning of the case to either death or recovery. Intermittent bleeding from the kidney or bladder he considers a congestion His treatment for malarial hæmaturia is quinine, iron, mercury, and ergot.

Dr. Sim agreed with Dr. Sandford that the case reported was one of true malarial hæmaturia, and mentioned a patient of his own, a year old, who suffered with the disease.

Dr. S. R. Dunn, of Greenville, Miss., never gives quinine unless the urine clears up between the paroxysms, nor with a tremulous tongue. In many cases quinine does harm. But when indicated it is always given hypodermatically, as he found in one case that pills had passed unaffected through the intestinal canal. With a dry, coated tongue, turpentine is given as in typhoid fever. In another case where the attack was intermittent and the tongue coated, but not dry, a hypodermatic injection of one-fourth grain of morphine was given, followed by ten grains of calomel and soda, and a dose of nitrate of magnesia. On the seventh day, there was another paroxysm, the hæmorrhage returning and the tongue being tremulous, dry and red-pointed. Calomel and soda were given again, and the case recovered without quinine. The belief is expressed that hæmaturia is due to splenic and hepatic conjestion, the post-mortem appearance closely resembling that observed in the spleens of cattle upon which post-mortems have been made by the speaker. He believes also that hæmaturia may be complicated with malaria, but that it is a different disease from intermittent fever.

A Member: Has never found blood corpuscles in the urine, but always a great deal of bile. Jaundice is the most prominent symptom. Thinks that hæmostatics are fatal, and urges free action of the bowels, kidney, and skin, with supporting treatment.

Dr. Malone stated that, having abandoned quinine and calomel, he treated sixty-two consecutive cases with hyposulphite of soda and fiuid extract of buchu, without a death. He gives the hyposulphite in sixty-grain doses every three hours, and has now discarded buchu, as it nauseates, and does no good in his opinion. The first part of the treat-

ment is to gorge the stomach with water, which will be vomited, and will wash out the mucus. Then he gives the hyposulphite. The judicious use of cool water will control nausea. The hyposulphite is increased until it acts on the bowels, but hypercatharsis must be avoided.

Dr. Klophel, believed that the disease is due to a microbe in the kidney, and has used bichloride of mercury with success.

Dr. H. L. Williford regarded malarial hæmaturia as a strictly malarial disease, which must be combatted by quinine in large doses, and by calomel. He prefers to give quinine hypodermatically. Calomel in large doses controls nausea, and large enemata of cold water are used to assist its action. The speaker has never failed to see a case improve after getting the system thoroughly under the influence of quinine.

Three Cases of Ear Disease.

Reported by Dr. James L. Minor, of Memphis, Tenn. (*Memphis Med. Month.*, Feb., 1888.) In the first case, symptoms of acute inflammation of the middle ear were relieved by the removal of a large *pediculus capitis*, which was found on the drum-membrane. In the second case, rupture of the membrane, produced by a blow with the open palm over the ear, was cured in six weeks by cleanliness, boracic acid, and occasional applications of lunar caustic. In the third case, a mass of wax, and afterwards a glass bead, one-fourth of an inch in diameter, were removed from the auditory canal. The bead had been in the ear for seven years. The symptoms were soon relieved.

Lead Lotions in Eye and Ear.

Dr. F. C. Hotz, of Chicago, (*Southwest. Med. Gazette*, Jan., 1888,) states that lead lotions should be applied only to the conjunctiva of the lids, and then washed off. In an ear affected with catarrhal inflammation and perforation of the drumhead the secretions will precipitate carbonate of lead from the acetate, and the deposit will do damage. Several cases illustrating the irritation caused by lead in the eye and ear are given, and the opinion is expressed that it had better be discarded.

Nœggerath's Criticism of Emmett's Operation.

Dr. H. C. Dembitz, of Louisville, Ky. (*Southwest. Med. Gazette*, Feb., 1888), refers to Prof. Nœggerath's claim that the

lacerated cervix is mended too often in America, and even in Germany, and that all the troubles which come from laceration of the cervix are produced just as often without the condition. He ridicules the long list of diseases said to be dependent upon laceration, and gives statistics from his own cases to fortify his position. The writer sums up the views of Nœggerath and other Germans, and claims that the statistics given by Prof. N. are faulty because he selects for comparison fifty cases of laceration and fifty of uterine disease without laceration.

Treatment of Dengue, Cholera Infantum, Etc.

Dr. T. J. Heard, of Galveston, Texas (*Daniel's Tex. Med. Jour.*, Feb., 1888), recommends the following in dengue:

℞.—Ol. ricini ..... ʒ ij.
Spts. terebinth ..... ʒ j.
Tr. opii camph.. ..... ʒ ij.
Glycerin ..... ʒ ij.
Aquæ, q. s. ad... ..... ℥ iij.

M.—S.: Give one-third of the mixture in two tablespoonfuls of warm water every fourth hour until free purgation occurs.

Hot foot baths and warm teas. In one or two days the fever usually returns. Repeat the same measures.

In cholera infantum the treatment is as follows: Calomel, gr. j; fine crystallized sugar, ʒ j; triturate thoroughly and divide into 20 powders; put one dry on the tongue every 15, 30, or 60 minutes, one teaspoonful of cold water being given with each powder. Usually two or three will stop the vomiting, and the fever will leave as soon as the characteristic actions are produced.

In malarial fever the following combination, recommended forty years ago to the writer, is used:.

Blue mass, quinine, and compound extract of colocynth, of each ..... ʒ j.
Oil of black pepper ..... gtt. x.
Glycerine, q. s. M.—Make 30 pills.

S.: Give two pills every three hours until free purgation occurs.

Then, as a restorative, the following:

℞.—Sulphate of iron, sulphate of quinine, of each.. ʒ j.
Sulphate of magnesia ..... ʒ ij.
Dilute sulphuric acid ..... ʒ jss.
Water, q. s. ad.. ..... ℥ viij.

M.—S.: Give one to two teaspoonfuls in half a glass of water before meals.

Pleurodynia.

Dr. R. P. Davies, of Petty, Texas (*Daniel's Tex. Med. Jour.*, Feb., 1888), thinks this disease is poorly understood and treated. The cases seen by the writer had the following symptoms: Sitting posture; great pain in and around the heart, or near it, with dyspnœa; respiration short and shallow; face bleached or sallow; eyes protruded, with dark circles around them; no fever; pulse a little quickened; some coldness of the skin; kidneys, and especially the bowels, rather obstructed; urine high colored and burning; appetite variable; previous cervicodynia, and sometimes lumbodynia, or both, which disappeared a day or two before the pain settled in the breast and sides Most of the cases were attacked at night after a few hours' sleep. Treatment consisted in purgation, diuretics, diaphoretics, and counter-irritation. The first prescription was the following:

℞.—Hydrarg. chlorid. mitis.....gr. xxx.
Aloin.. .....gr. vj.
Sodæ bicarbonat.....gr. xv.
M Div. in pulv. No. iii. S. One every three hours.

Castor oil or salts if necessasy. After purgation—

℞. Potass bicarbonat.....ʒj
Potass nitrat.....ʒij
Tr. guaiac.....ʒij
Vin. colchici.....ʒij
Fld. ext. buchu.....ʒij
M. S.—Tablespoonful in a wineglass of sweetened water every three hours.

As a counter-irritant, a Spanish fly blister, four by six inches, between the shoulder blades just below the nape of the neck, and allowed to remain on for three hours. As soon as the blisters came, pain would cease and improvement begin. Then the following:

R. Syr. sarsæ. comp .....ʒiv
Syr. ferri iodid.....ʒj
Potass iodid .....ʒj
Tr. cinchon. comp.....ʒiv
M. S.—Tablespoonful before each meal.

Removal of Shot from the Eye Six Months after Entry.

Reported by Dr. Wm. Caston, of Corsicana, Tex. (*Daniel's Tex. Med. Jour.*, Feb., 1888). The shot struck the nasal side of the right cornea, causing great pain and immediate loss of sight. Seven weeks afterwards the writer found the ordinary appearance of iritis, which had existed since the injury

was received. Lens opaque. Five months later the shot was seen in the aqueous humor, having rolled forward through the pupil without the patient's knowledge. Another physician had advised waiting; but the symptoms growing worse, the writer operated. After some difficulty, the body was removed with a David's spoon. Every effort was made to restore the sight, but in vain. The shot had remained in the eye without being encapsulated.

Novel Theory in Regard to an Additional Function of the Liver.

Er. F. A. Schmitt, of Schulensburg, Texas (*Daniel's Tex. Med. Jour.*, Feb., 1888) refers to an article found in a late Geman journal, in which the view is expressed that, although a germicide may be found for each germ, still we are only assisting nature after all. The liver and skin are the avenues by which microbes escape from the system, and the theory is that we must stimulate the liver to healthy action in order to produce the effects desired. "It is not the remedy or remedies with which we cure, but it is, as it ever was, the exact interpretation of the language of nature which should determine our action in regard to treatment; and he is the ideal physician (or surgeon) who fully understands, comprehends, and skilfully interprets the idiom of nature."

Treatment of Acute Pulmonic Inflammations of Young Children.

Dr. Q. C. Smith, of Austin, Texas (*Daniel's Tex. Med. Jour.*, Feb., 1888) considers bronchitis, catahrral pneumonia, and pleurisy, *essential fevers*, in which, by "judiciously conserving the vital powers," we can often restore health with the use of very few drugs. Boerhaave's rule to keep the feet warm, the head cool, and the bowels open, is enjoined. Unless there be marked cerebral disturbance, the patient is given quinine, usually the bimuriate, per rectum or endermically. In severe bronchitis or pneumonia, within the first twenty-four hours, and without extreme debility, an emetic of ipecac is usually given; and if there be pleurisy, a portion of a drop of Fleming's tincture of aconite is added to each dose until emesis occurs. The emetic is well diluted with warm water, sweetened, and given in broken doses at intervals from fifteen to thirty minutes, and rarely repeated after emesis. If not greatly prostrated, the patient is then given one or two doses of one-twelfth to one-sixth of a grain of calomel, well mixed with milk sugar. The bowels are kept easily moving with cascara cordial or sweet senna tea. For the cough, small and diluted doses of the syrups of sen-

ega, lactucarium, ipecac, and wild cherry are given. For asthenia occurring early in these cases a very warm bath, with rubbing, is often of great benefit. If there be much pain, a liniment of chloral hydrate, camphor, and fluid extract of aconite root, well mixed with lanolin, and used once to thrice daily, is employed. As specific alteratives, asclepias tuberosa, bryonia, senega, ipecac, and ergot, the latter being most useful in the early stages. If the heart-beats are very rapid, with dyspnœa or cyanosis, tincture of strophanthus, sometimes with tincture of digitalis, in doses of one-twentieth to one-fiftieth of a drop, well diluted, every two to four hours. Over the whole chest wear a warm, moist, woolen-flannel girdle. Use svapina and codeia if opiates are absolutely necessary. Pleurisy pains yield to aconite, with liniments and warm applications. For laryngeal or pharyngeal complications, nitrate of sanguinariana in small diluted doses. Feed every three hours, or at longer intervals, as babies are usually fed too often.

Dysentery.

Dr. S. H. Cowden, of Solgohachie, Ark. (*Daniel's Tex. Med. Jour.*, Feb., 1888) recommends the following injection when the stools are fœtid and contain blood:

℞. Mucilag. amyli..... ℥ij
Pulv ipecac.....gr. xx
Morph. acetat..... ..gr. ¼ to ½.—M.

Patient is placed on the right side, and one-half injected; then on the back, and the other half injected. The formula given is beneficial in the dysentery sometimes attending the puerperal state.

Relation of Fistula in Ano and Phthisis Pulmonalis.

Dr. Joseph M. Mathews, of Louisville, Ky. (*Atlanta Med. and Surg. Jour.*, Feb., 1888), quotes from authorities in the past upon this subject, and considers the justness of their views. The writer bases his opinions upon clinical facts, and reaches the following conclusions: "In incipient phthisis the operation is always justifiable, other things being equal; in the rapid, progressive fistula, an operation should be done to save tissue and prevent serious consequences; if great cough exists, it should militate against the operation; if it can be determined that the sinus is single, and the discharge, inconvenience and pain are not great, advise against the operation."

Address of the President of Jefferson County Medical Society, January, 1888.

By Dr. John D. S. Davis, of Birmingham, Ala. (*Atlanta Med. and Surg. Jour.*, Feb., 1888). The address treats of the good work done by the Society in medical science; of the necessity for a cultured profession; and of the means for promoting that end. The writer treats his subject in a pleasing and interesting manner.

Subperiosteal Resection of a Rib for Empyema in Children. Recoveries.

Dr. Albert B. Strong, of Chicago, Ill. (*Atlanta Med. and Surg. Jour.*, Feb., 1888), reports two cases.

I. A boy, aged 6, with previous good health; for four weeks had coughed; at last there was effusion into the right pleural cavity. This increased, was attended with fever, night sweats, and emaciation. A hypodermic needle inserted just above the eighth rib in the axillary line, revealed pus. The eighth rib was exposed by a parallel incision of two inches; periosteum split longitudinally an inch, midway between the upper and lower border of the rib; periosteum and vessels peeled off from the posterior surface of the rib with a blunt hook, and three-fourths of an inch of bone cut away with nippers; internal layer of periosteum split to the same extent, and parallel to the internal layer; pleura opened; two quarts of laudable pus evacuated; cavity washed out with a warm saturated solution of boracic acid, and a large rubber drainage tube was fixed in position. Improvement began at once. The cavity was washed daily with warm water; a wad of oakum placed over the wound; the tube kept in six weeks, at which time the lung was entirely expanded, and the wound completely healed.

II. Boy, aged 17, always delicate, with tuberculous family history, had pleural pneumonia of the lower lobe of the right lung. Convalescence in a few days. A relapse followed, with effusion, night sweats, cough, and diarrhœa, and a temperature of 102° to 104°. Five weeks from the beginning of the effusion, empyema having been made out by the hypodermic syringe, an inch and a half of the ninth rib was removed, four quarts of laudable pus escaping, and at the last about four ounces of clear serum. Cavity washed out as before, and tubes inserted. Pleura was three-fourths of an inch thick. Large masses of lymph were washed out during the next few days. Hot water injections used. Subsequently the opening on the inside was closed by the arching

of the diaphragm, and the symptoms returned. Wound reopened, and five ounces of fœtid pus and debris removed. From this time, under appropriate treatment, the patient got along well, and six months from the commencement of his illness he left for his home perfectly recovered. The writer thinks that the views of Dr. Garnett, of Washington, who advises against an operation, should not go unchallenged.

Mechanical Treatment of Vomiting in Pregnancy.

Dr. J. W. Flanders, of Wrightsville, Ga. (*Atlanta Med, and Surg. Jour.*, Feb., 1888), having seen accounts of the benefit derived from inserting the finger into the os uteri and pushing the organ upwards, adopted this measure with prompt success in a case of his own. A medical friend was advised to try the same means in a case which seemed to be hopeless. Only once afterwards did vomiting occur, and this was attributed to indiscretion in diet. The writer thinks that Graily Hewett is right in ascribing vomiting during pregnancy chiefly to uterine displacements.

Relation of Sciatica to Organic Stricture of the Urethra.

Dr. J. W. Griggs, of West Point, Ga. (*Atlanta Med. and Surg. Jour.*, Feb., 1888), believes in sciatica proper, but is "well assured that nine cases in ten of so-called sciatica are simply nervous reflexes incident to organic stricture of the urethra." Two cases are given in which pain, supposed to be due to sciatica, was relieved by divulsing the urethra, and the subsequent use of the sound. In another case the same measures relieved a case of impotency, with severe and continuous pain in the back and hip. A child who seemed to be suffering from hip-joint disease, was cured in a month by circumcision. An adherent prepuce existed, with very irritable glands and some ulceration.

Hydrastis Canadensis in Uterine Troubles.

Dr. Robert B. Barron, of Clinton, Ga. (*Atlanta Med. and Surg. Jour.*, Feb., 1888), refers to four cases in which the following conditions were present, putting the symptoms together: Uterine displacement, profuse leucorrhœa, inflammation of the cervix, endometritis, metrorrhagia, and climacteric bleeding. Various means were used for relief, but in the first two cases with no success. Twenty drops of the fluid extract of hydrastis after each meal, and another dose at 11 o'clock, proved to be of great value, and in the two

last cases (climacteric bleeding) the patients have greatly improved. The writer, who saw this treatment recommended in the *New York Medical Journal* for February 19th, 1887, by Dr. Reynold W. Wilcox, believes that hydrastis is the best drug known at present for the control of uterine hæmorrhage due to congestive dysmenorrhœa, sub-involution from endometritis, metritis, and the climacteric.

Mitral Regurgitation.

Clinical lecture by Dr. Nathan S. Davis, of Chicago (*Atlanta Med. and Surg. Jour.*, Feb., 1888). The patient, a switchman, aged 55, was seized with shortness of breath while carrying coal upstairs, and has been unable since to take active exercise. No pain, or elevation of temperature, or shrinking of the chest; a noticeable bulging on the left side; breathing very short; venous pulse in the neck very active; a moderate degree of pulmonary resonance anteriorly on both sides; moderate clearness in the infra-clavicular region; more or less dullness on both sides below the mammary region, continuing down on the right side, and embracing the whole hepatic region; dullness on the left side not so marked; posteriorily an increased area of dullness in the cardiac region, more than would be accounted for by an increase of space occupied by the heart or pericardium; a lack of intestinal resonance; feet and legs very œdematous; a sharp, rather coarse râle just at the end of each inspiration, which is not deep; inspirations forced and a little short, and at the end of each a sharp, bronchous, crockling sound is heard, intermediate between a dry and moist râle; little or no cough; no expectoration, as far as known. The stethoscope, placed a little left of the sternum, directly over the cardiac space, gives a regular to-and-fro murmur, showing that the systole brings one murmur and the diastole another, indicating regurgitation on the left side. Over the tricuspid area there is an equally plain double murmur, showing that the tricuspid does not close the auriculo-ventricular opening, and explaining the free pulsations in the neck. When the stethoscope fails to give an impression of the impulse, it is because the heart does not strike the chest-walls naturally. When there is a distinct sound and absence of impulse, with increased area of dullness, it is due to pericardial effusion. In this case the liver is probably enlarged. As to treatment, digitalis is the reliance, given so as to seduce the heart-beats to 67 or 70 in a minute. A favorite prescription with the writer has been tincture of

digitalis and fluid extract of scutellaria, the latter of which is a nervine and tonic, and is very useful in dyspepsias. In the present case, ten drops of the fluid extract of scutellaria and five of digitalis, are to be used every four hours, and increased, if necessary, until the desired effects are obtained; after which the dose is diminished, or given at longer intervals. The writer has been using strophanthus, and although unable to speak definitely of its merits, considers it a good remedy, destined to supersede digitalis in many cases.

Nightmare.

Professor E. H. Randle, of Jackson, Tenn. (*Memphis Med. Monthly*, Feb., 1888), contributes an article on this subject. The symptoms before sleeping are nervousness, insomnia, etc.; and during sleep unpleasant dreams precede the trouble. Nightmare may come on in the daytime. The causes are exhaustion, indigestion, oversleep, sleep at unusual hours, and sleeping on the back, with a low head, or on the side, inclined backwards, with the face turned directly upward. "Bad dreams are greatest blessings that come in sleep; they have doubtless saved many a life." The results of repeated attacks may be very detrimental to the nervous system. The real cause, although a conjecture, is supposed by the writer to be the blood's flooding the motor nerves at the base of the brain. Position may be attended to in order to ward off the attack. If the patient will arouse himself from his dreams and take a sip of whiskey, the measure will prove effectual.

Laparotomy in Diseases of the Female Pelvic Organs.

By Dr. L. S. McMurtry, of Danville, Ky. (*South-West Med. Gazette*, Jan., 1888). This article is from the advance proofsheets of Groom's Minor Gynæcology, American edition, revised and enlarged by Dr. L. S. Murtry.

Abdominal section may be either a diagnostic or therapeutic measure, or both. It should be used as a diagnostic measure when other efforts to ascertain the exact nature of the trouble have been unavailing. Laparotomy is positively indicated in suppurative peritonitis. Chronic inflammation of the ovaries with adhesions, and ovarian abscess, are indications. In salpingitis, when the ends of the tubes are occluded, and contain pus or blood, and in hydro-salpinx, the operation is called for. Battey's and Tait's operations are referred to. In Fallopian pregnancy, removal of the ovum

and tube should immediately follow the diagnosis. The operation should be performed midway between the catamenia, if possible, and the patient should be put under the best hygienic conditions. Antiseptic precautions should be rigidly observed; and in this article these measures are fully treated, as they relate to the patient, surgeon, instruments, etc. The incision should be the shortest possible, and the peritoneum not opened until the hæmorrhage has ceased. The usual rules for the toilet of the peritoneum, and for the drainage, are carefully enforced, and the after-treatment must be conducted according to existing indications. If circumscribed or diffuse peritonitis set in, saline purgatives, as recommended by Tait, must be administered. Slight gaseous distension may be relieved by a rectal tube. The dressing should be removed, as a rule, on the eighth or ninth day; but if at any time after the operation a rise of temperature occurs, unaccompanied by tympanites, the dressings should be removed in order to see whether a stitch abscess has occurred. Inflammation of the parotid gland and tetanus may attack patients during convalescence.

Identity of Membranous Croup and Diphtheria of the Larynx.

Dr. W. Cheatham, of Louisville, Ky. (*Am. Prac. and News*, Feb., 1888), discusses this question at some length. The writer enters quite thoroughly into the literature of this subject, which he treats in an interesting and instructive manner. The whole question is reduced to two points: Is the false membrane a fibrinous exudate? or, Is it a product of epithelial transformation? The whole world is agreed on the exudative nature of the false membrane in the sub-glotic portions of the larynx and the remainder of the respiratory passages. The divergencies regarding the pharyngeal false membrane are more apparent than real. The writer has observed how often the symptoms given to croup by many dualists differ, and their views are fully discussed in this article. He claims that we get nothing but confusion by separating the two diseases.

Non-Identity of Pseudo-Membranous Croup and Diphtheria.

By Dr. John A. Ouchterlony, of Louisville, Ky. (*Am. Prac. and News*, Feb., 1888). The writer contributes an excellent article upon this subject, referring to various authorities to corroborate his views. After discussing the points of similarity and dissimilarity in the two diseases, the following conclusion is reached: "Whatever the degree of resem-

blance between the pathological products of the two diseases, there can be no question that essential differences between them exist in regard to etiology and clinical history, and these differences are so great and invariable as to compel us to regard them as entirely distinct morbid conditions." The differential diagnosis given is as follows:

DIPHTHERIA.	CROUP.
Occurs in epidemics.	Not so.
Infectious.	Not so.
Has a period of incubation.	Not so.
Most common in children, but occurs at all ages.	Most common in children; rare in adults.
Principal seat, tonsils and parts above the glotis. When invading the larynx it is secondarily.	Primary and principal seat, the larynx and trachea. Implicates the upper parts, but to a slight degree.
Glandular enlargements present.	Not so.
Asthenia early and marked.	Not so.
Febrile disturbance more or less prominent.	Generally high.
Symptoms largely due to toxæmia.	Symptoms due chiefly to mechanical obstruction.
Nephritis a common accompaninent.	Not so.
Acute fatty degeneration of the heart frequent.	Not so.
Muscles of the arms, legs, chest, and eye-ball in a state of fatty or waxy degeneration, often with paralysis.	Not so.
Duration often more protracted.	Runs its course in a few days.

Broncho-Bronchitis.

A clinical lecture on this subject, by Dr. Nathan S. Davis, of Chicago, Ill., is reported in February No. *New Orleans Medical and Surgical Journal.* Over a month previous, the patient had recovered sufficiently from an attack of bronchopneumonia to leave the hospital. When he came under Dr. Davis' care, he was expectorating copiously—muco-pus; having night sweats; feverish during afternoons and first part of the nights; pulse 110. Fearing the development of "quick consumption," Dr. Davis prescribed muriate of ammonia mixture every three or four hours, and two grains of quinine three times daily. At the end of two weeks, Dr. Davis was agreeably surprised to find cough, fever and expectoration lessened. Ammonia mixture doses were reduced. From that time he began gradually to gain. His temperature keeps about 99°, walks about the hospital freely, but continues to have a rather quick pulse and a harassing cough. The probability is there remains enough inflammatory exudation to keep up an irritative action.

This condition is called pulmonary sclerosis, or chronic

inflammation of the connective tissue of the lungs and bronchioles, which causes the sore chest, and disposes to contract it—not as an abscess, but by a continued irritation, proliferation, increased sclerosis, added to the obstructed bronchioles, diminishes the capacity for air. It is frequently met with in the North, where bronchitis, broncho-pneumonia, etc., are common; and each attack failing to clear up the exudative material before another attack occurs, adds a little and a little more, till, in a few years, the connective tissue is extensively involved in a slow, gradual, inflammatory sclerotic condition, and the air-cells obliterated, so as not to permit a full expansion of the lung. Hence shortness of breath, wasting of flesh, etc., until a decided renewal of inflammation, when the more diseased part of the lung takes on a purulent disintegrating process, with the usual phenomena of pneumonia. Such a patient should seek an equable and a warm climate.

One Year of Dermatology.

Dr. Henry Wm. Blanc gives (*N. O. Med. and Surg. Jour.*, Feb., 1888) a record of all cases of skin diseases (373) in the New Orleans Charity Hospital for the year beginning Dec. 1, 1886, of which only 21 were negroes. Full descriptive notes are given of a case of partial albinism, of 11 cases of herpes zoster, a case of hydroa, a case of morphœa, of three cases of molluscum fibrosum—one of which is illustrated by a full page wood cut—and one case of nævus nervorum. Of the 87 cases of eczema, 27 were under 18 years of age, and 6 were over 60 years of age. In the cases of zoster, paint of half drachm oxide of zinc, in an ounce of flexible colodion, acted well. There were 22 cases of lepra. Under the internal use of chaulmoogra oil, in gradually increasing doses, improvement in all forms of the disease is immediate and continuous. The notes of some of the other cases are to be continued in a future number of the *Journal.*

Diphtheria.

Dr. R. W. Walmsley, of Canandaigua, N. Y., gives a clinical report (*N. O. Med. and Surg. Jour.*, Feb., 1888) of nine cases of diphtheria treated by him during a recent outbreak. The character of the membrane, the symptoms and the sequelæ were all pathognomonic. Bichloride of mercury in heroic doses was the remedy relied on. Thus in a lady, aged 35, he gave one-eighth grain hourly for eight hours; then one-sixteenth grain hourly for some time. He gave

free feeding and alcoholic stimulation in addition, and in some cases coca wine, etc. He also used sodium benzoate in about four-grain doses for adults every second hour—especially in the cases where the bichloride had to be discontinued on account of the cramps it produced. Water with spirits of turpentine was kept constantly boiling in the sick rooms. As a spray for the throat, etc., saturated solution of sodium benzoate was much used; as was also Dr. J. Lewis Smith's astringent wash or mop: ℞.—Carbolic acid, ten minims; Monsel's solution, ʒ ij; and glycerin enough to make ℥ j mixture. S.: Apply very gently two to four times daily with a large-sized, long-handled camel's-hair brush. One infant six months old, and another eighteen months old, died. All the other patients were from eighteen months to sixty years of age, and recovered.

Malarial Hæmaturia Treated by Rectal Alimentation.

Dr. Richard H. Day, of Baton Rouge, La., reports the case (*N. O. Med. and Surg. Jour.*, Feb., 1888) of a boy, aged 10 years, who had had repeated attacks of intermittent fever, but now has malarial hæmaturia, and fever—as high as 105°—and stomach so irritable as to retain neither food nor medicine. Hence he prescribed 15 grs. quinine, 15 drops tincture of digitalis, and 5 drops spirits turpentine, made in two tablespoonfuls of emulsion—to be given as an enema and repeated every four hours. Applied over the stomach blistering tissue. Four enemata were given and retained, and the pulse fell as did also the temperature. The blister also drew well. Bloody urine stopped next day, but treatment was continued except the blister. Food was gradually given by the mouth, and enemata were discontinued; but quinine was given by stomach, as also calomel and other medicines to meet the indications. Half ounce of quinine was given in 48 hours per rectum, and retained. The Doctor thinks this is about the first case on record where a virulent disease has been systematically and almost exclusively treated by rectal medicines and carried to a successful termination.

Double Fracture of Humerus Caused by Muscular Contraction.

Dr. D. G. Lebeuf, of Houma, La., reports (*N. O. Med. and Surg. Jour.*, Feb., 1888) that a strong, healthy, muscular man, aged 28, who had no constitutional disease, while serving as the pitcher in a base-ball game, undertook to throw "a curve ball," and broke his arm (humerus) in two places—all due to muscular action.

Malarial (?) or Paroxysmal Nymphomania.

Dr. J. P. Francez, Lafayette, La., reports a remarkable case *N. O. Med. and Surg. Jour.*, Feb., 1888). Married woman, age 35, mother of five children, has been subject to malarial fevers since childhood. Prior to her marriage had two attacks of insanity. Menstruates now normally. Last March she had fits of abstraction, and one day fell unconscious. She then had hallucinations, and her mind was violently and emotionally excited for twelve days—every second day being more pronounced. During these spells she would run her hands between her thighs, as if violently scratching. This was accompanied by groans and murmurs. Then her mind cleared up. But next night there began to be a return, and she called upon her husband for intercourse. On the nights and days free of fever no sexual disturbance was manifested. She gradually improved under bromides, chloral, quinine, dilute muriatic acid, iodine applications over the spleen, and Fowler's solution of arsenic.

I. Recto- and Vesico-Vaginal Fistula. II. Neurasthenia with Dysmenorrhœa, Due to Anteflexion. III. Ovaries Removed for Insanity.

Dr. William Goodell, of Philadelphia, Pa., has a clinical lecture on these subjects in *North Carolina Medical Journal*, February, 1888.

I. Patient 65 years old; changed life when 48; youngest of her 8 children is 25 years old. Eighteen months ago she began again to lose blood, which continued for six months, when an operation of some kind stopped this hæmorrhage; but incontinence of urine has existed nearly ever since. The vulva is nearly closed; but, when a probe is passed through some of the minute openings in the vulvar cicatrix, a little fæces and urine escape, showing that a recto-vagino-vesical fistula exists. There is no cancer. The case is probably the result of specific disease. The cure of recto-vaginal fistula is more difficult than that of vesico-vaginal fistula. It is a good plan to use a vaginal set and a rectal set of sutures, which should be combined with over-stretching of the sphincter. An operation Dr. Goodell likes is to incise about half an inch from the border of the fistula through the vaginal mucous membrane. Dissect this as a frill and invert into the rectum. One set of sutures is passed through the edges of this frill per rectum, and a second set is used to bring the edges of the denuded vaginal surface together.

II. Patient æt. 33; married 12 years, but never pregnant.

About five years ago she began to complain of pain in back and in the coccyx after sitting a short time, and a constant dull ache in the thighs and knees. Urethra burns after micturition. Leucorrhœa. Menstruation irregular, lasts for five days, very painful, attended by gushes of blood with immediate relief of pain for a time. As a rule, Dr. Goodell thinks that in 95 out of 100 cases, this symptom of pain in the coccyx after sitting is a neurotic manifestation, and not a traumatism. The manner in which a patient with traumatic or neurotic coccygodinia sits down and rises up is pathognomonic. She will grasp the arms or back of her chair, and gradually let herself down sideways. When she rises the procedure is reversed. Examination with the sound reveals, as was expected, anteflexion and endometritis. The other symptoms, such as pain in her groins and womb, irritable bladder, are neurotic.

III. This case represents a lady who had borne children, imagined that a reptile was in her, and had a phantom tumor on the right side. The insanity being clearly traceable to menstrual derangement, the tubes and ovaries were removed, and improvement began.

Little Things in Medicine.

Dr. N. B. Herring, of Wilson, N. C. among other things in a good paper on this subject (*N. C. Med. Jour.*, Feb., 1888,) says of the *hypodermic syringe:* The plan of introducing the needle at an angle of 45° is not the best. Pinch up the muscle with the thumb and finger, and press the needle perpendicularly into the muscle from half inch deep to the whole length of the needle, according to the size of the muscle. It gives less pain, is easier done, and produces less irritation. The salts of mercury, especially, introduced just beneath the skin, almost invariably leave a red spot, which fades slowly and may cause a slough. Sulphuric ether leaves a purple spot for weeks. The needle for ordinary use should be the smallest.

Nose Bleed—How to Stop It. Take a piece of tough, raw, fat, salt pork, cut it wedge shaped, four inches long, half inch thick and three-quarters of an inch wide. Force it into the bleeding cavity—*clear through into the pharynx*—and the work is done. It is antiseptic, painless, and never fails to stop the hæmorrhage. It is easily removed.

To Wash Out the Female Bladder. Sit the woman on the edge of a chair, fill a Davidson syringe with the wash, *and be sure it is full;* introduce the rectal nozzle into the bladder

and slowly, very slowly, pump in the fluid. When the bladder becomes intolerant it will flow out beside the nozzle of the syringe, and then you may pump it in faster.

To Give Small Powders to Infants. Wet the tip of your fore-finger with your tongue, get the powder on your finger, wipe it on the baby's tongue and let it nurse.

To Mop Out a Child's Throat. Twist a wad of absorbent cotton on the end of a stick and let the mop be large and bushy; dip into the wash, and at the right moment press it one time against the back part of the child's throat. This is much better than camel-hair pencils, as the pressure squeezes the wash out of the mop and diffuses it upon every part of the inflamed surface without a repetition of the process.

The Flannel Jacket. When you have a case of chest cold, pneumonia or bronchitis in a child, make a close-fitting flannel jacket to reach from the clavicle to the lower ribs; saturate this with a mildly stimulating liniment, and sew it tightly around the child's chest. It is worth more than all the blisters, mustard-plasters, cups, etc., in existence. I let my little patients wear them several weeks and sometimes all winter, occasionally applying the liniment. About the best liniment I have used is composed of—Castor oil, 4 parts; spts. camphor, 2 parts; spts. turpentine, 1 part; tinct. cantharides, 1 part.

Hydrorrhœa Gravidarum complicating Multiple Pregnancy.

Dr. J. A. Faison, of Mt. Olive, N. C., reports the case (*N. C. Med. Jour.*, Feb., 1888). Mrs. C. says her bag of waters broke early in morning, but that she lacked four or five weeks of full term. Os undilated and not patulous, but there was a profuse watery discharge from the vagina, and the feeble pains she had had stopped. The discharge continued from December 2nd till January 21st, when labor set in. Breech presentation in left sacro-anterior position, and soon a male child was born. The labor was perfectly dry, nor was the skin of the child coated with the usual vermix caseosa. Before the second stage was completed, a second child in utero was clearly defined by palpation. In about half an hour after first birth, bag of waters presented and ruptured with escape of a large quantity of liquor amnii. Same presentation and position as first child, and natural delivery. One placenta with two cords. There appeared to be but one membrane with a dividing septum; but dissection revealed a common chorion, with distinct amnion re-

flected from the peripheral aspect of the placenta and thus uniting to form the septum.

(I.) Amyl Nitrite for Opium Poisoning. (II.) Lead Poisoning by Dalley's Salve.

Dr. T. D. Haigh, of Fayetteville, N. C., reports the two cases (*N. C. Med. Jour.*, Feb., 1888).

Case I. Woman, had taken ʒiiss laudanum about three hours, and was apparently in a dying condition, totally unconscious; face and hands livid purple; pulse flickering; pupils dilated but ragged in outline; respiration not exceeding 4 per minute. A hypodermic of atropin had been given, but with no visible effect. A pearl of amyl nitrite was broken and imperfectly administered. A second pearl was more carefully administered, and the effect was wonderful. The face and hands quickly resumed their natural hue; respirations gradually but rapidly became natural, and the pulse became more steady, though still rapid and weak. She opened her eyes when spoken to, and requested to be left alone. One of the pupils remained dilated for some days afterwards.

Case II. A year old child, previously healthy except constipation. One night she had violent colic, from which she was readily relieved but did not rally quickly, and remained languid, with loss of appetite, increasing pallor and dullness of eyes. The muscles began to waste, and it became evident this was not a usual case of impaired indigestion. Paralysis and convulsions suddenly set in; but no cause could be found until the mother stated that she was using "Dalley's salve" on her own breast for fissured nipples. This salve contains from 4 to 5 per cent. of lead probably in the form of an acetate. The mother had been in the habit of smearing her nipples with salve at bedtime, and the child lying by her side nursed *ad libitum* during the night.

Typhlitis and Perityphlitis.

The *North Carolina Medical Journal*, Feb., 1888, contains a clinical lecture on this subject by Prof. A. Hardy, of Paris, France. Patient male, age 28, laborer, temperate, previously healthy, except is ordinarily constipated. During the night, had violent colic, attended by nausea, but no vomiting or diarrhœa, and he had headache, fever, prostration and chills from time to time. Two days later, the pain was intense in right iliac region, exaggerated by pressure, radiating to the left and upward, pulse 110; temperature 103°+. Deep

pressure over iliac-fossa region gave feeling of a resistant tumor, sausage shaped. Castor oil caused three liquid stools, but the percussion dull sound remains. The cæcum is evidently impacted with fæces, which has caused inflammation, extending even to the neighboring peritoneum. Albert in 1838 first described this disease of typhlitis and perityphlitis. The cæcum is fixed in the iliac-fossa, resting directly on the cellular tissue covering the right iliacus muscle, and the peritoneum passes over it, instead of investing it, covering only the anterior part and sides. Heuce a perforating cæcal ulcer, lets the contents of the bowel filter into the cellular tissue. Typhlitis is rare under age of 8 or 10 years; is more frequent in men than women. The chief lesion is ulceration of the cæcum, and inflammation and suppuration of the cellular tissue, sometimes extending down the thigh. But again a very grave termination may be in peritonitis—with or without perforation. It is impossible to say in a given case whether perforation will occur or not. Suppuration is quite as grave, for it leads to iliac abscess which may open into the peritoneum, but more frequently into the intestine. In beginning treatment of simple typhlitis, mildly purge with castor oil, soda sulphate or a dose of seltzer; if peritonitis, apply leeches and give opium, and use good judgment.

Sulphuretted Hydrogen Gas for Phthisis Pulmonalis.

Dr. A. P. Brown, of Fort Worth, Texas, reports (*Tex. Cour. Rec. Med.*, Feb., 1888) three cases of consumption treated by his partner, Dr. J. W. Irion, and himself, each with pronounced relief. One of the patients was pregnant, but the continuous use of the gas gave proof of immunity from danger to the fœtus. The test that proves that the sulphuretted gas given per enemata enters the lungs is to have the patient breathe on a piece of white blotting paper that has been soaked in a solution of acetate of lead, when a brownish black color occurs on the paper, according to the amount of gas expired.

Vinegar for Epistaxis.

Dr. H. C. Ghent, of Belton, Tex., says (*Tex. Cour. Rec. Med.*, Feb., 1888) Dr. Frank Allen and he having had good results from injecting *dilute apple vinegar* in a case of obstinate hæmorrhage after a vesico-vaginal fistula operation, has also used it in two cases of nose bleeding with satisfaction. Inject a little into the bleeding nostrils. No doubt dilute acetic acid would do as well.

Treatment of Stricture of Urethra of the Penis.

Dr. J. W. Irion, of Fort Worth, Texas, gives a tabular report (*Tex. Cour. Rec. Med.*, Feb., 1888) of 25 cases stricture in the penile portion of the urethra cured by the urethrotome.

Poisoning by Mistletoe.

Dr. O. C. Buster, of Lewisville, Texas, reports the cases (*Tex. Cour. Rec. Med.*, Feb., 1888) of five children who, on January 1st, ate mistletoe berries gathered from an elm tree. About 10 P. M., four had vomiting, followed by purging in three. The oldest boy and a girl of ten were practically well the next day. But emesis and catharsis continued in the other three cases until the *fourth* day, when the Doctor was called. The pulse was compressible and accelerated, and the temperature in each was subnormal, ranging from 95.5° to 97° F. On fifth day, temperature in the two boys was normal, and were well by ninth day. But the temperature of the girl was subnormal on fifth day; pulse frequent and feeble; unconscious evacuations of bowels, containing mucus and blood, and an increase in bile. At 1 A. M., of *sixth* day, she had coffee-ground vomiting, and would even vomit water after taking it, containing small particles of desquamated epithelium or mucous membrane, varying in color from bluish black to snuff and light pink. Temperature sprang up to 102°; insomnia; rolling from side to side; pulse scarcely perceptible. Died at 1 P. M., after two spasms—the first, one hour before death and the other closed the scene.

Menopause at Nineteen Years of Age.

Dr. I. K. Frazer, Rusk, Tex., reports the case (*Tex. Cour. Rec. Med.*, Feb., 1888) of Mrs. H. She began to menstruate at 15, and was regular until July 1883—six months after her marriage (Jan. 1883), when she was 18 years old. Pregnancy and disease were eliminated from the diagnosis. She is perfectly healthy, but has not menstruated for over four years—since her 19th year. The Doctor thinks this age (19) is the youngest on record for the menopause.

Catarrhal Pneumonia.

Dr. Franch H. Tucker, San Augustine, Tex., writes on this subject (*Tex. Cour. Rec. Med.*, Feb., 1888), but gives no suggestion that is not commonly known to the profession.

Treatment of Acute Pneumonia by Leading Texas Physicians.

Dr. Chas. H. Whiting, of Bellevue, Texas, adds nothing of interest, unless it be his advocacy of Norwood's tincture of veratrum viride, in doses of from five to seven drops every two or three hours until the temperature is reduced to 101°.

Dr. J. M. Isbell, of Abilene, Texas, reports a case of *intermittent pneumonia.* (The late Dr. Otis F. Manson, of this city, called attention to a number of such cases in several of his publications, and others have noticed such cases.)

Dr. J. E. Stinson, of Montague, Tex., thinks quinine is the sheet anchor of treatment of all stages of pneumonia in his section of Texas.

Compiled from Notes in *Tex. Cour. Rec. Med.*, Feb., 1888.

Carbolic Acid for Adenitis, Buboes, etc.

Dr. D. C. Peyton, of Jeffersonville, Ky., has used carbolic acid (*Progress*, Feb., 1888) with excellent effect for arresting adenitis, buboes, and various glandular enlargements. In six cases of chancrous bubo, which he records, his practice was to apply the acid to the bubo with a camel's hair pencil, and reapply it at varying intervals of from four to eight hours, for a day or two, when the bubo would be found to have been absorbed; or if it became necessary to incise, it acted nicely on the cut surfaces and promptly healed them. When combined with iodoform, it very nearly destroys the unpleasant odor of the latter. Carbolic acid is also a local anæsthetic, and so reduces the sensibility of the part to which it is applied as to allow of free incisions almost without pain. But it is its efficient and prompt power to prevent suppuration, and to hasten the healing of suppurating glands when exposed that forms the topic of the Doctor's paper. When first applied to the skin or mucous membrane, it produces a burning sensation of short duration; and forms a whitish, very superficial eschar.

The Human Stomach.

The capacity of the human stomach and intestines to bear abuse is evidenced by the fact that an insane patient who died at the Prestwich asylum had in his abdominal cavity eighteen hundred and forty-one foreign substances, including nails, tacks, glass, pebbles, hair, etc. The weight of this heterogenous mass was eleven pounds and ten ounces.

Book Notices.

Practical Treatise on the Medical and Surgical Uses of Electricity. By GEORGE M. BEARD, A. M., M. D., and A. D. ROCKWELL, A. M., M. D. Sixth Edition. Revised by A. D. ROCKWELL, M. D. Professor of Electro-Therapeutics, New York Post-Graduate Medical School and Hospital, etc. With nearly 200 Illustrations. New York: William Wood & Co. 1888. 8vo. Pp. 758.—xxx. (From Publishers.)

We might prolong a notice of this book to any readable length for the gratification of a few, and yet not be able to say all we feel is due this excellent standard work. It covers all points to say that, so thoroughly has the author gone over each detail of manipulation and application, so accurate are the descriptions, and so well suggested are the various uses of the different forms of the electric force, this *Treatise* stands before the profession everywhere as the leading text-book on the therapeutics of electricity for both the student and the practitioner. Its pages include descriptions, etc., of localized and generalized faradizations, localized and central galvanization, franklinization, electrolysis and galvano-cautery.

Diseases of the Skin. By W. ALLEN JAMIESON. M. D., F. R. C. P. Ed., Extra Physician for Diseases of the Skin, Edinburgh Royal Infirmary, etc. With Woodcut and Eight Colored Illustrations. Edinburgh, Young J. Pentland, 1888. 8vo. pp. 546—xiv. Price $6.50 in cloth. (For sale by West, Johnston & Co., Richmond.)

The American Publisher of this handsomely issued book is the J. B. Lippincott Company, of Philadelphia. Dr. Jamieson thinks that after some rapid strides in dermatology during the past ten or twelve years, "a slack" has come upon further advances; and he thinks it well to collect what has been gained into a systematic work so as to be generally understood. The present work covers the whole field of skin diseases, as generally considered in text books. Facts are stated positively, and when opinions are ventured they seem to be well guarded by personal experiences or the guarded descriptions of eminent clinicians. This book well goes along with the other text books on skin diseases common in this country. It is a systematic work, that is well adapted to the wants of the student as well as practitioner.

Health Lessons. By JEROME WALKER, M. D., Lecturer on Hygiene at the Long Island College Hospital, etc. New York: D. Appleton & Co. 1887. Cloth. 12mo. Pp. 194. (From Publishers.)

This is a primary book, and is intended to teach health subjects to young children, so that the lessons which may be learned may be truthful and useful in after life. They are such lessons as should be taught in the grammar grade of schools. It teaches in the simplest manner many facts of daily importance about our bodies, what they need, the uses of air and sunlight, the physiology of breathing, voice, digestion, etc., the principles of wear and repair, of work and play, and some primary lessons about the brain, the nerves, the senses, etc. In a short appendix, notes of what to do in cases of some accidents, injuries, poisoning, etc., are well added. An excellent index assists ready reference to subjects.

Fever-Nursing. By J. C. WILSON, A. M., M. D., Author of a "Treatise on the Continued Fevers"; Physician to Philadelphia Hospital, and to Hospital of Jefferson Medical College, etc. Philadelphia: J. B Lippincott Co. 1888. Extra cloth. 12mo. Pp. 210. Price $1.00. (From Publishers.)

This is another of the "Practical Lessons in Nursing," designed for the use of professional and other nurses, and especially as a text-book for nurses in training, which the publishers have undertaken to publish as a series. The present monograph teaches not only *how* fever patients are to be cared for, but *why* they must be cared for in particular ways. The first three chapters give an immense deal of plain practical instruction as to fever-nursing in general. Chapter IV tells what to do in continued fevers; Chapter V, what to do in periodical fevers; Chapter VI, in eruptive fevers, and Chapter VII, in fevers having marked local manifestations, such as rheumatism, pneumonia, cerebro-spinal fever, and diphtheria. Such books as this in the hands of intelligent nurses will stimulate the Doctor to study, if it does him no other good.

Ledger of Monthly Balances and Index of Accounts: A Companion to the Medical World Visiting List. The Medical World, 1520 Chestnut st., Philadelphia.

This Ledger contains 160 pages of good writing-paper, is of size to fit the coat-pocket, and has a flexible, strong leather cover. It has a thumb alphabetical index, which greatly assists to refer to an account. Each page is ruled so as to

keep accounts of three persons, with their addresses, showing at a glance the page of Visiting List and the amount of balance due at the end of each month. The publisher, Dr. C. F. Taylor, is so confident that his system of keeping accounts will please the Doctor that he offers to send the Visiting List as well as this Ledger to any physician on receipt of $2.00; "and if not found satisfactory after three months' use, will refund money on return of books." This is certainly a liberal offer, and one that any practitioner in search of a system of bookkeeping can well afford to avail himself of.

The Three Ethical Codes. Detroit, Mich.: Illustrated Medical Co., Publishers. Cloth, pamphlet. 12mo. Pp. 55. Price, post paid, 50 cents. (From Publishers.)

This pocket manual contains the "Code of Ethics of the American Medical Association—its Constitution and By-Laws;" the "Code of Ethics of the American Institute of Homœpathy;" and the "Code of Ethics of the National Eclectic Medical Society." The uses of such a manual are self-evident.

Nasal Polypus with Neuralgia, Hay Fever and Asthma in Relation to Ethmoiditis. By EDWARD WOAKES, M.D, Lond., Senior Aural Surgeon, and Lecturer on Diseases of the Ear at the London Hospital, etc. With Illustrations. Philadelphia: P. Blakiston, Son & Co. 1887. Cloth. 12mo. Pp. 140. Price $1.25. (From Publishers.)

A principal purpose of this book is to trace the chief reflexes of nasal polypi, etc., beginning from an ethmoiditis of necrosis. Many items of important detail are given to sustain the view of the pre-eminent importance of this ethmoiditis as the starting-point of a number of disordered conditions and diseases, such as hay fever, nasal asthma, and other direct and reflex troubles. One would hardly look upon this as a text monograph, but it is a good help to the specialists who are springing up all over the country.

Four Months among the Surgeons of Europe. By M. SENN, M. D., Ph. D., Milwaukee, Wis. Pamphlet. 12mo. Pp 157.

This pamphlet, filled with items of interest and instruction as to the practises and opinions of numerous surgeons of Europe, whose personal acquaintance Dr. Senn made while on a four months trip to Europe, consists of a series of letters addressed to Dr. Chr. Fenger, and published in the *Journal of the American Medical Association*, from which reprints have been made.

Transactions of the Medical Society of the State of Pennsylvania, 1887, Vol. XIX. 8vo. Pp. 183. Dr. W. B. Atkinson, Philadelphia, Permanent Secretary.

This volume is nicely issued in book binding, and the papers are mostly valuable. It contains three papers on the treatment of phthisis, and Dr. Charles W. Dulles, of Philadelphia, Pa., gives a report on Pasteur's method to prevent hydrophobia, to show the errors of Pasteur's observations. Dr. Dulles shows that cases of the disease occur without any specific cause of contagion, and that even spontaneous cases occur. Dr. John H. Packard, of Philadelphia, reports a case of right vaginal colotomy which is of interest to surgeons.

Efficacy of Coca Erythroxylon. By MARIANI & CO., 127 Fifth Ave., New York, N. Y. 12mo. Pp. 61.

This neatly issued book, though intended chiefly for advertising purposes, contains a great deal of useful information about the therapeutics of the coca preparations. The "Vin Mariani," used as a general tonic, has gained for itself universal esteem. It is more tonic than iron and quinine, and does not produce constipation, and combines nicely with hypophosphites, and even with bromides when such a combination is needed. We have used "Vin Mariani" in practice, and have found it to equal the claims made for it.

Manual of Medical Jurisprudence, with Special Reference to Diseases and Injuries to the Nervous System. By ALLAN McLANE HAMILTON, M. D., One of the Consulting Physicians to Insane Asylums of New York City, etc. With Illustrations. New York: E. B. Treat. 1887. 8vo. Pp. 390. Price $2.75. (From Publisher.)

The scope of this book of reference for lawyers and doctors is limited to those conditions of the nervous system which are so often the bases of litigation, Its total of eight chapters treat, medico-legally, of insanity in general, and in its medico-legal relations, hysteroid conditions are feigned diseases, epilepsy, alcoholism, suicide, cranial and spinal injuries. It is impossible to make a review of such a book in the limited space allowed a book notice, because the book is made up of reports of cases of decisions by courts, at times at variance with decisions on like subjects. But as a general word of reference on many points of medical importance, this manual will at once take rank in the list of standard authorities. Every physician likely to be called on as an

expert should familiarize himself with the facts and lessons taught in this book, so that he may answer intelligently questions that may be asked him by the courts, relating especially to the responsibility of the prisoner, etc.

Doctor and Patient. By S. WEIR MITCHELL, M. D., LL. D., Harv., President of the College of Physicians of Philadelphia, etc. Philadelphia: J. B. Lippincott & Co. 1888. 12mo. Pp. 177. Price $1.50. (From Publishers.)

This is simply a readable advisory hygienic book, showing what can and ought to be done to develop and sustain the health of men and women. It possesses literary merit as well, which gives its attraction to the lay reader. Its intention is to popularize facts familiar to physicians, and of which the true family physician acquaints his patrons in incidental conversations when he has opportunities to sit and chat.

Synopsis of the Physiological Action of Medicines. By LOUIS STARR, M. D., Clinical Professor of Diseases of Children, Hospital of University of Pennsylvania, and JAMES B. WALKER, M. D., Professor of Medicine in Woman's Medical College, Philadelphia, assisted by W. M. POWELL, M. D., Physician to the Clinic for Diseases of Children, Hospital of University of Pennsylvania. Third Edition. Enlarged. Philadelphia: P Blakiston, Son & Co. 1888. 16mo. Pp. 72. Price 75 cents. (From Publishers.)

This "Synopsis" was prepared for the use of the students of the Medical Department of the University of Pennsylvania, with the approval of the Professor of Materia Medica. It is intended merely as an outline of the subject, in a more convenient form for reference than a chart. Every other page is blank, for the purpose of letting the student make such notes as his teacher may further suggest.

Intestinal Diseases of Infancy and Childhood. By A. JACOBI, M. D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, of New York City, etc. 1887. George S. Davis, Detroit, Mich. Paper. 12 mo. Pp. 301. Price 25 cents. (From Publisher).

This No. 5, 1887, of "The Physicians' Leisure Library" was issued September 15, 1887, although we received it February 3, 1888. But whatever the cause of this delay, we find ourselves well repaid by an examination of the contents. Its scope is the physiological, hygienic, pathological and therapeutical as applied to infancy and childhood. The

first 92 pages are taken up with a consideration of infant feeding. Contrary to the advice of most practitioners, the author remarks among other things, that the *mixed milk* of a whole dairy is preferable to the milk of one cow, in cases of children requiring artificial feeding; and yet he says *condensed milk* is not a uniform article, and mentions this as a prominent reason why it should not be used as a substitute. While Dr. Jacobi justly deserves the merit of an eminent authority, we are yet afraid he sometimes allows prejudice to interfere with his judgment of practices which other physicians deem preferable to those he recommends. But with this criticism, it is to be noted that, in most points, those who follow his advice will follow the lead of an excellent practitioner in diseases of children. The work is not a systematic text-book on intestinal diseases of children, because it says but little on matters of etiology, symptomatology, diagnosis, etc., of many of the diseases which are considered chiefly pathologically and therapeutically.

Transactions of the College of Physicians of Philadelphia. Third Series. Vol. IX. Philadelphia. 1887. 8vo. Pp. cdlxxiii—203. (From the College.)

This volume possesses unusual interest. The first 478 pages are given up to a history of the College during its first century, which was completed January 2, 1887. But in giving this history, Dr. W. S. W. Ruschenberger gives a great deal of the history of medical men of the United States even prior to the Revolution. Fortunately for American medical history, as Philadelphia was for about three-quarters of a century the centre of American medical education, the records have been preserved, with memoirs of the members of the College, in which memoirs a great deal of medical history is involved. Turning, however, to the last 203 pages of the present volume, we find some excellent papers that were read at various meetings during the year 1886–7. The first of these is "A Study of Pulmonary Consumption in the City of Philadelphia," by Thomas J. Mays. Dr. Francis X. Dercum records "Some Interesting Specimens from a Case of Lead Poisoning." Dr. Charles W. Dulles notes a "Case of Anencephalous Monster." "Man's Aptitude for Labor in the Erect Position," by Dr. Oscar H. Allen, is a very interesting paper. Dr. H. Augustus Wilson commends "Soluble Compressed Hypodermic Tablets." Dr. J. Ewing Mears has an illustrated paper of value on

"Closure of the Jaws, and its Treatment." Dr. N. A. Randolph contributes a "Note on the Irradiation of Motor Impulses." Dr. H. R. Wharton reports a "Case of Innominate Aneurism Treated by Simultaneous Distal Ligation of the Right Common Carotid and Subclavian Arteries—Recovery." Dr. J. H. Musser reports two cases of Malignant Endocarditis." Dr. William Osler adds a note to his former paper, showing some uses of "Antifebrin." Dr. Charles H. Burnett has a good paper on "Ear Trumpets." Dr. Arthur V. Meigs reports a "Case of Empyema Causing Secondary Abscess in the Pelvis, and Terminating in Spontaneous Discharge at the Umbilicus." Dr. Francis X. Dercum reports "Two Cases of Hemichorea Associated with Bright's Disease." Dr. Edward Jackson's paper is on "The Influence of Cocaine on the Pupil and Cornea." Dr. S. Weir Mitchell writes on "Neuralgic Headaches with Apparitions of Unusual Character." Dr. Frank Woodbury reported some "Cases of Exploratory Laparotomy followed by Appropriate Remedial Operation." The volume concludes with a paper by Dr. Harrison Allen on "The Clinical Value of the Teeth."

Contributions to the Study of the Diseases of the Heart and Lungs. By JAMES R. LEAMING, M. D., Emeritus Professor of Diseases of the Chest and Physical Diagnosis in the New York Polyclinic, etc New York. E. B. Treat. 1887. Cloth. 8vo. Pp. 300. Price, $2 75 (From Publisher.)

Although almost every chapter of this book has appeared as a contribution to some medical journal or Society *Transactions*, this is the first time they have been collected and presented systematically in one volume. Dr. Leaming's eminence and physical diagnosis and familiarity with the diseases of the heart and lungs as a special study for many years, and the now current adoption of views which he originated, give to this work a special value and interest. He was among the first of authors to show that mucous, subcrepitant and crepitant râles may all have their local origin within the pleuræ. And he records cases—such as are often met with in practice—of *consolidated* lungs, giving such auscultatory signs, which show the impossibility of these râles being inter-pulmonary. Passing over the part devoted to cardiac murmurs and their significance, etc, we should observe that the author's therapeutic remarks, as the result of his long experience, on chloride of ammonium, mercurial preparations and thuja occidentalis deeply impress the memory of the practitioner, and will lead to a

popularization of these remedies in the conditions named as suitable for their application.

Transactions of the Association of American Physicians. Vol. I. 1886. 8vo. Pp. xxiv—261. Vol. II. 1887. 8vo. Pp. xx—254. (Dr. Wm. Osler, Philadelphia, Pa., Recorder.)

This Association, organized June, 1886, is doing good work. It is to meet annually in Washington, D. C. Its active membership is limited to 100 physicians, elected from all parts of the United States. Our space does not allow of more than a mention of the titles of papers printed, every one of which possesses merit of a high order. Dr. Francis Delafield, New York, N. Y., "Chronic Catarrhal Gastritis;" Drs. S. Weir Mitchell and Morris J. Lewis, Philadelphia, Pa., "The Tendon-Jerk and Muscle-Jerk in Disease, and Especially in Posterior Sclerosis;" Dr. F. Peyre Porcher, Charleston, S. C., "Method of Managing Typhoid Fever;" Dr. James Tyson, Philadelphia, Pa., "Does the Present State of Knowledge Justify a Clinical and Pathological Correlation of Rheumatism, Gout, Diabetes, and Chronic Bright's Disease?" Dr. James T. Whittaker, Cincinnati, O., "Spasm of the Glottis in Rickets;" Dr. Edward T. Bruen, Philadelphia, Pa., "Notes on Cases of Diaphragmatic Pleurisy;" Dr. W. T. Councilman, Baltimore, Md. (Illustrated by chromo-lithographs), "Certain Elements Found in the Blood in Cases of Malarial Fever;" Dr. Henry M. Lyman, Chicago, Ill., "Tetany;" Dr. Reginald H. Fitz, Boston, Mass., "Perforating Inflammation of the Vermiform Appendix;" Dr. William M. Polk, New York, N. Y., "Peri Uterine Inflammation;" Dr. William H. Welch, Baltimore, Md., "Experimental Study of Glomerulo-Nephritis;" Dr. Wm. Osler, Philadelphia, Pa., "Bicuspid Condition of the Aortic Valves;" Dr. George H. Sternberg, Surgeon U. S. Army, "Bacillus of Typhoid Fever;" Dr. T. Mitchell Prudden, New York, N. Y., "Experimental Mycotic or Malignant Ulcerative Endocarditis;" Dr. E. C. Seguin, New York, N. Y., "Clinical Study of Lateral Hernianopsia;" Dr. H. F. Formad, Philadelphia, Pa., "The 'Pig-Backed' or Alcoholic Kidney of Drunkards;" Dr. F. Forcheimer, Cincinnati, O., "Case of Hodgkin's Disease;" Dr. F. W. Draper, Boston, Mass., "Pancreatic Hæmorrhage and Sudden Death;" Dr. J. E. Graham, Toronto, Canada, "Notes of a Case of Hepatico-Bronchial Fistula;" Dr. R. Palmer Howard, Montreal, Canada, "Hepatic Cirrhosis in Children;" Dr. John Gruté-

ras, Charleston, S. C., "Direct Functional Murmurs and Obstructive Safety-Valve Action in the Heart;" Dr. Hosmer A. Johnson, Chicago, Ill., "Pneumatic Differentiation;" Dr. John S. Billings, Surgeon U. S. Army, "Methods of Research in Medical Literature;" Dr. H. C. Wood, Philadelphia, Pa., "Antipyretic Treatment of Fever;" Dr. Francis Minot, Boston. Mass., "Observations on the Use of Antipyrin and Thallin in the Treatment of Typhoid Fever;" Dr. Henry Hun, Albany, N. Y., "Sewer-Gas Poisoning;" Dr. Israel T. Dana, Portland, Me., "Case of Aneurism of the Abdominal Aorta;" Dr. William H. Welch, Baltimore, Md., "Hœmorrhagic Infaction;" Dr. Wm. Osler, Philadelphia, Pa., "Notes on Hæmorrhagic Infarction;" Dr. Edward T. Bruen, Philadelphia, Pa., "Bergeon's Method of Treating Phthisis;" Drs. Frederick C. Shattuck and Henry Jackson, Boston, Mass., "Six Cases of Phthisis and one of Chronic Bronchitis with Emphysema and Asthma, Treated by Rectal Gaseous Enemata;" Drs. Wm. Pepper and J. P. Crozer Griffith, Philadelphia, Pa., "Treatment of Phthisis by Gaseous Enemata; Dr. F. P. Kinnicutt, New York, N. Y., "Atrophy of the Gastric Tubules—Its Relations to Pernicious Anæmia;" Dr. E. C. Seguin, New York, N. Y., "Third Contribution to the Study of Localized Cerebral Lesions;" Dr. J. E. Atkinson, Baltimore, Md., "Forms of Typhoid Fever Simulating Remittent Malarial Fever;" Dr. James J. Putnam, Boston, Mass., "Frequency with which Lead is Found in the Urine, and on Certain Points in the Symptomatology of Chronic Lead Poisoning." An index is appended to each of the two volumes.

Editorial.

New Enactment about the Virginia State Board of Medical Examiners.

The principal change in the law "to regulate the practice of medicine and surgery," suggested almost unanimously last October by the Medical Society of Virginia, then in session, and to which reference has been made editorially in our January and February issues, has been adopted by the Virginia Legislature, and became a law of the State of Virginia by the signature of the Governor on March 3d, 1888. As there are many who are yet unacquainted with the wording

of the enactment establishing the Board, we print it in full, substituting the amended section 4 for the former paragraph filling that space:

AN ACT TO REGULATE THE PRACTICE OF MEDICINE AND SURGERY.

1. Be it enacted by the General Assembly of Virginia, That there shall be for this State a Board of Medical Examiners, consisting of three members from each Congressional District in the State, and two from the State at large, whose term of office shall be for four years, or until their successors are appointed and qualified. The term of office of the Board first appointed shall commence on the first day of January, eighteen hundred and eighty-five.

2. The said Board shall consist of men learned in medicine and surgery, and shall be appointed by the Governor on the first day of November, eighteen hundred and eighty-four, and every fourth year thereafter, from a list of names to be recommended by the Medical Society of Virginia. He shall also appoint five homeopathic physicians, who may be nominated to him by the Hahnemann Medical Society of the Old Dominion, in the manner hereafter provided. Vacancies occurring in such Board for unexpired terms, shall be filled in the same manner. Such recommendations shall be by the votes of a majority present at some meeting of the said Societies, and the same shall be certified to the Governor by the President and Secretary of such meeting: provided, however, that in case the Governor shall consider any of the persons so recommended unsuitable, he may decline to appoint such person or persons, and communicate the fact to the presiding officers of the Society presenting the nomination, and such Society shall, within ninety days thereafter, make other recommendations, in the manner hereinafter prescribed, which shall stand on the same footing in all respects as those first made: and provided further, that if such Society fail to make such recommendations prior to the time of appointment, or within ninety days, aforesaid, then the Governor shall appoint such Board, either in whole or part, without regard to such recommendations. If any of said Examiners shall cease to reside in the district for which he was appointed, it shall vacate his office.

3. The members of said Board of Medical Examiners shall qualify and take the usual oath of office before the County

or Corporation Court of the county or corporation in which they shall respectively reside. The officers of said Board shall be a President, Vice-President, and Secretary (who shall also act as Treasurer), said officers to be members of and elected by said Board. The first meeting of the same shall be at Richmond, and at such time as the Governor shall notify the members by mail to assemble. Subsequent regular meetings shall be held at such times and places as the Board may prescribe, and special meetings may be held upon the call of the President and five members, but there shall not be less than one regular meeting per annum. Eleven members of said Board shall be a quorum. Said Board may organize at its first meeting, and may, at its first or any subsequent meeting, prescribe rules, regulations, and by-laws for its own proceedings and government, and for the examination of candidates for the practice of medicine and surgery by its individual members.

(1. Be it enacted by the General Assembly of Virginia, That section 4 of an act, entitled An Act to Regulate the the Practice of Medicine and Surgery, approved January 31, 1884, be amended and re-enacted so as to read as follows:)

Section 4. It shall be the duty of said Board, at any of its meetings, to examine all persons making application to them, who shall desire to commence the practice of medicine or surgery in this State; and when an applicant shall have passed an examination satisfactory as to proficiency before the Board in session, the President thereof shall grant to such applicant a certificate to that effect. A fee of $5 shall be paid to said Board, through such officers or members as it may designate, by each applicant before such examination is had. In case any applicant shall fail to pass a satisfactory examination before the Board, he shall not be permitted to stand any further examination within the next three months thereafter, nor shall he have again to pay the fee prescribed as aforesaid: provided, however, no applicant shall be rejected upon his examination on account of his adherence to any particular school of medicine or system of practice, nor on account of his views as to the method of treatment and cure of diseases; and provided further, that when, in the opinion of the President of the Board, any applicant has been prevented by good cause from appearing before the Board, he shall appoint a Committee of three members, who shall examine such applicant, and may grant him a certificate, which shall have the same force and effect as though granted by the full Board.

(2. This act shall be in force from its passage.)

5. The fund realized from the fees aforesaid shall be applied by the Board toward its expenses, including a reasonable compensation to the President and Secretary.

6. Any person who shall obtain a certificate as aforesaid from the President of said Board shall cause his name to be registered in the clerk's office of the County or Corporation Court for the county or corporation in which he shall reside; and it shall be the duty of said clerk to register the name of every such person, describing such certificate, together with the date thereof, and the name of the President of the Board, signing the same in a book kept for the purpose, as a part of the records of his Court, which shall also give the date of each registration, and his fee for each registration shall be one dollar, to be paid by the person whose name is registered.

7. No person who shall commence the practice of medicine or surgery after the first day of January, eighteen hundred and eighty-five, shall practice as physician or surgeon for compensation without first having obtained a certificate and caused his name to be registered as aforesaid. Any person violating the provisions of this section shall pay a fine of not less than fifty nor more than five hundred dollars for each offence, and shall be debarred from receiving any compensation for service rendered as such physician or surgeon.

8. Any person who shall have been assessed with a license tax as a physician or surgeon by any Commissioner of the Revenue in this State at any time prior to the first day of January, eighteen hundred and eighty-five, shall be taken as having commenced the practice of medicne or surgery prior to that date; but any person who shall not have been so assessed, shall be taken as not having commenced such practice prior to that date.

9. Any physician or surgeon who shall commence to practice after the first day of January, eighteen hundred and eighty-five, and who snall reside in an adjoining State, within ten miles of the boundary line of this State, shall be entitled to stand the examinations and receive the certificate hereinbefore provided for, and such certificate shall be registered as hereinbefore provided, in that county in this State, which is nearest his place of residence, and such certificate and registration shall make it lawful for him to practice medicine or surgery.

10. Nothing in this act shall be taken as including or af-

fecting in any way the practice of dentistry, nor shall it include physicians or surgeons residing in other States, and called in consultation in a special case with a physician or surgeon residing in this State. Nor shall it be construed as affecting or changing in any way the laws in reference to the license tax to be paid by physicians, surgeons, and dentists.

11. Provided, the provisions of this act shall not apply to any midwife.

As a further law on the subject of attempting to practice in Virginia without previously having a proper license, we append:

AN ACT to * * * provide for the Mode of Applying for License to Transact rny Business in this State—Approved March 6th, 1886. Acts of Assembly 1885–6, p. 512.

§ 80. No person shall, without a license authorized by law, practice as attorney-at-law, physician, surgeon or dentist, and no person who shall hereafter apply for license to practice as a physician or surgeon, shall have such license granted to him, unless he shall have complied with the provisions of an act, entitled An Act to Regulate the Practice of Medicine and Surgery, approved January thirty-first, eighteen hundred and eighty-four: provided, that no person who was licensed to practice as physician or surgeon, at any time prior to January the first, eighteen hundred and eighty-five, need comply with the provisions of said act in order to be again licensed as a physician or surgeon.

Dr. John N. Upshur.

In mentioning the name of Prof. George Ren. Johnson, in our February issue, as one of the Faculty of the Medical College of Virginia who favored the resolution of the Medical Society of Virginia, requiring candidates for practice to pass satisfactory examinations before the State Board of Medical Examiners in session, and who did not wish graduates of his College exempted from such examinations, we should have added the name of Prof. John N. Upshur as holding practically the same views.

New York Polyclinic.

In connection with the improvements in medical educational laws, requiring more extensive, and we hope thorough

preliminary and collegiate training ere the student is admitted to practice, the marked increase in facilities for practical instruction is one of the most pleasing signs of the times. In the great medical centres, a fine theoretical training is not altogether sufficient for obtaining honors and preferment. Clinical experience is essential. And the opportunities for gaining thorough bedside and dispensary training have become so extended, that every day sees the class possessing these qualifications becoming larger. A few years ago our means of obtaining practical instruction in medicine and surgery were, if we were unable to enter a hospital, limited to attending a few clinics while working for a diploma, or to riding around with our preceptors, or to being started out with untrained eyes, ears and fingers, to get that experience at as small a loss to the community as Providence might see fit to permit. The advent of systematized clinical instruction marks an advance of great importance. About a dozen clinical schools have been started in this country during the past six years. Several of these have succumbed. Want of success being due to insufficient clinical material. But the flourishing condition of the more successful of them removes the fear that they might not be permanent.

The first in the field with a purely clinical system of teaching, and the model of all the rest, was the New York Polyclinic, organized in 1880 and 1881, and opened in November, 1882. The number of doctors who matricalated in the first year, 1882–3, was 161; 1883–4, 182; 1884–5, 229; 1885–6, 240; 1886–7, 301. No greater compliment could be paid to an institution than the progressive increase in its attendance. It not only possesses unrivalled clinical advantages, but is provided with a complete laboratory for microscopical and experimental research.

The William F. Jenks Memorial Prize.

The first Triennial Prize, of $250, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Diagnosis and Treatment of Extra-Uterine Pregnancy." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the Trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may, in their

judgment, be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia."

The prize is open for competition to the whole world, but the essay must be the production of a single person. The essay, which must be written in the English language, or if in foreign language, accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., addressed to Edward Wilson, M. D., Chairman of the William F. Jenks Prize Committee, before January 1, 1889. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The Committee reserves the right to make no award if no essay submitted is considered worthy of the prize.

The "Annals of Surgery."

The only English journal which is devoted exclusively to surgery, enters now upon its fourth year. Drs. L. S. Pilcher, of Brooklyn, N. Y., and C. B. Keetley, of London, England, are the chief editors, assisted by most all the able surgeons of this country, as well as Europe, which is sufficient guarantee of the literary merits. We bespeak for it the co-operation of the members of the profession who are interested in progressive surgery. Messrs. J. H. Chambers & Co., St. Louis, Mo., are the publishers, and deserve great credit for undertaking to produce such an important journal as the "*Annals*," and for its artistic execution.

Prescription and Memorandum Books Free.

We have just received some neat little prescription and memorandum books issued by the Mellier Drug Company, of St. Louis, dealers in physicians' supplies, surgical instruments and appliances of all kinds, and proprietors of Tongaline, Mellier's standard—Elliott patent—saddle-bags and buggy-cases, and Mellier's improved uterine supporters. The book contains a very convenient table for approximating at a glance the date of confinement when the date of

the last menstruation is given. It will be mailed to any physician who will send his address to the Mellier Drug Company, St. Louis, Mo., and mention this journal.

New Orleans Polyclinic.

The great Charity Hospital of New Orleans offers peculiarly excellent advantages for the clinical study of disease—such, especially, as are common in the South. We are therefore glad that a Polyclinic School has been organized in that city, to begin a course in April. The advertisement is in our journal, and we hope this new enterprise in the Southern city will be well sustained by liberal patronage. It will be on the same general plan as the great New York Polyclinic, and other like institutions.

Proposed Amendments to the Constitution of the American Medical Association.

The American Medical Association is to hold its annual meeting this year in Cincinnati, Ohio, on May 7th–12th inclusive. The Official Programme of the General Ssssions and the Sections, together with Announcements of railroad rates, hotel accommodations, etc., will be given through the *Journal* of the Association of April 7th, 1888. In the meantime we find in the *Journal* of March 17th, the following statement of proposed changes in the Constitution of the Association, which we publish in full so as to let every member of the Association be prepared to act when the matter is brought up.

"It must be remembered by the members of the Association that several amendments to the constitution will come up for adoption at the approaching meeting in Cincinnati. As they met with no opposition at the last meeting and would then have been adopted had it not been for the rule requiring all amendments to the constitution to be before the body for a year, it is probable that they will be adopted and become part of the law of the Association at the next meeting. The reasons for the amendments were fully stated by the Special Committee that proposed them The complete report of this committee can be found in No. 26 of vol. viii of THE JOURNAL. The proposed amendments are as follows:

A substitute for an amendment adopted in 1884 to the second section of the constitution:

Members by *Application* shall consist of such members of the State, County and District Medical Societies entitled to

representation in this Association, as shall make application in writing to the Treasurer, and accompany said application with a certificate of good standing signed by the President and Secretary of the society of which they are members, and the amount of the annual membership fee, $5. They shall have their names upon the roll and have all the rights and privileges accorded to *Permanent Members*, and shall retain their membership on the same terms.

From the *fifth section* of the *Constitution*, relating to "*Standing Committees*," the *first* and *third paragraphs* should be stricken out, leaving intact only the second paragraph, relating to the "Committee of Arrangements." In place of the first paragraph to be erased, your committee recommend the insertion of the following important provision, viz.:

The General Committee or Council shall be composed of *two members* from each State and Territorial Medical Society entitled to representation by delegates in the Association, and from the Medical departments of the U. S. Army, Navy and Marine Hospital Service. They shall be chosen by the members registered and present at each annual meeting, from each State, Territory, and from the Medical Corps of the U. S. Army, Navy and Marine Hospital Service, acting separately, on the third day of each annual meeting; each delegation reporting the names of the members chosen to the Permanent Secretary of the Association on the same day, that they may be announced by him at the opening of the morning session of the fourth day. At the first election each delegation shall choose *two* members of the General Committee, one of whom shall serve *one* year, and the other *two* years, and at each annual election thereafter one member shall be chosen to serve for two years, thus making the term of office of members of the General Committee *two* years. It shall be the duty of the General Committee, thus constituted, to organize by choosing annually a Chairman and Secretary, and such sub-committees as may be found necessary to facilitate the work that may be assigned to it; to meet annually at the place and on the day preceding each annual meeting of this Association, and as often during that week as may be necessary; to nominate, on the third day of each annual meeting, all the general officers of the Association (none of whom shall be members of its own body), the members of the Committee of Arrangements, the Committee on Necrology, seven members of the Judicial Council, and three members of the Board of Trustees for publication for election by the Association; to recommend

the place and time of holding the next annual meeting; and to consider and report upon all subjects that may be referred to it by vote of the Association. The presence of one-third of the whole number of members elected to the General Committee shall constitute a quorum for the transaction of business. If, at any annual meeting of the Association, it shall be found at the close of the general meeting of the first day, that a quorum of the General Committee is not present, it shall be the duty of the President and Permanent Secretary to fill the vacancies in the Committee temporarily by selections from the lists of delegates registered as present from the States to which the vacancies belong.

In place of the third paragraph, the following:

The *Board of Trustees* shall consist of nine members, three of whom shall be elected annually on the nomination of the standing General Committee, and shall serve for three years. It shall be the duty of the Board to provide for and superintend the publication and distribution of all such proceedings, transactions and memoirs of the Association as may be ordered to be published, and in such manner as the Association may direct; and in doing this, it shall have authority to appoint an editor and such assistants, and determine their salaries, and procure and control such materials, as may be necessary for the accomplishment of the work assigned to it. To further facilitate its work, it shall be the duty of the Secretaries of the Association and of the several Sections, during each annual meeting, or as soon thereafter as practicable, to deliver to the Board, or such editor or agent as it shall appoint, all such records of proceedings, reports, addresses, papers and other documents as may have been ordered for publication, either in the general sessions or in the Sections. All moneys received by the Board of Trustees or its agents, resulting from the discharge of the duties assigned them, must be paid to the Treasurer of the Association, and all orders on the Treasurer for disbursements of money in any way connected with the work of publication, must be endorsed by the President of the Board of Trustees. It shall be the further duty of the said Board of Trustees to hold the official bond of the Treasurer for the faithful execution of his office; to annually audit and authenticate his accounts, and present a statement of the same in its annual report to the Association; which report shall also specify the character and cost of all the publications for the Association during the

year, the number of copies still on hand, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary.

Should these provisions be adopted by the Association, the Permanent Secretary should be authorized to substitute the name "General Committee" for "*Nominating Committee*," wherever the latter occurs in other parts of the Constitution and By-Laws, and similarly the "Board of Trustees" for "*Committee on Publication*."

If these amendments are adopted, it will not change the mode of nominating officers for the meeting in 1889, since the proposed General Committee or Council which by the amendments will hereafter form the Nominating Committee, must be elected on the third day of the meeting, and will be announced on the fourth or last day, which would be too late for them to make nominations at the Cincinnati meeting. If this General Committee is formed, it should, however, organize so that it will be an active standing committee, to do such business as may be necessary between the meetings of 1888 and 1889.

The Richmond Medical and Surgical Society

Has set an example for other local medical societies of the South, which can be adopted with benefit to their respective members. This Society meets on the second and fourth Thursday nights of each month, and its meetings have been rewarded lately by good papers and profitable discussions. The subjects of papers are selected by the authors themselves, and are announced even months in advance. Thus to print the programme for the remainder of this year, we find that at the meeting of March 22d, Dr. Jacob Michaux will read a paper on Perityphlitis, and Dr. Joseph A. White will report on Advances in Ophthalmology. During the two meetings in *April*, Dr. Joseph A. White will read a paper on Nasal Reflexes, and Dr. C. W. P. Brock a paper on Treatment of Tetanus. Dr. William Grebé will report on Advances in Obstetrics and Diseases of the Puerperal State, and Mr. Hugh Blair on Advances in Chemistry, Microscopy, Urinology, etc. During *May*, Dr. John G. Skelton will present a paper on Infantile Dietetics, and Dr. Lewis Wheat a paper on Hysterectomy. Dr. Thos. J. Moore will report on Advances in Gynæcology, etc., and Dr. M. D. Hoge, Jr., on Advances in Hygiene, Medical Jurisprudence and Toxicology. In *June*, Dr. M. D. Hoge, Jr., will read a paper on Arthritis Deformans, and Dr. Wm. S.

Gordon one on Pupillary Symptoms of Cerebral and Spinal Diseases. Dr Wm. P. McGuire will report on Advances in Surgery, and Dr. Landon B. Edwards on Advances in Physiology and Neurology. In July, Dr. Wm. P. McGuire will read a paper on Surgical Fever, Dr. Michaux will report on Physiological and Therapeutical Action of New Remedies, and Dr. Brock on Advances in Diseases of Children—especially Infantile Dietetics. Later on we will make other announcements.

Chesapeake and Ohio Route.

This Route will prove the most direct one for doctors and guests of this and other South Atlantic States to reach Cincinnati, Ohio, during the session of the American Medical Association to convene in that city May 7th. There is no change of cars between Richmond and Cincinnati, and the time is about twenty-four hours—distance, about 650 miles. There is every convenience on this route for pleasant travelling that is usual on the best of railroad lines. The scenery along this line is grand and picturesque. The Route passes through the "mineral district" of Virginia and West Virginia, and by many of the favorite summer springs resorts of this continent. We learn that a number of Virginia and North Carolina doctors will adopt this route, and others from the South will no doubt prefer it.

The New Orleans Polyclinic,

Which is to open its first regular course Monday, April 2, 1888, we trust will prove an eminent success. It is a school of instruction very much needed in the South—especially for those doctors who cannot spare the time or expense of going to New York. Read the advertisement on page 6 in front of reading matter, and speak of it to others, and help to popularize it.

Graduates in Medicine, 1888.

Southern Medical College, Atlanta, Ga., 32; Medical Department of University of Nashville and Vanderbilt University, 82; Medical Department University of Tennessee, 76; Memphis Hospital Medical College, 54.

Close of Volume XIV.

It is a gratification to announce that the fourteenth annual volume of the *Virginia Medical Monthly* closes with a good record as to progress, and an encouraging future to cheer

the editor who is guiding its course. The "new feature," introduced last April—giving synopses of every original article that appeared the month before in the Southern and Southwestern regular medical journals, including those of Kentucky and Tennessee—has proved eminently successful, and has supplied a need in journalism. It was impossible to read, much less to pay for, all the good journals published in the territory named. The "new feature" of the *Virginia Medical Monthly* exactly satisfied the want of the profession, North, South and West, as this one journal gives monthly information of *all* that is contributed as original matter to each of the Southern medical journals.

During the *Fifteenth* annual volume, to begin with the April number, while continuing this same feature, arrangements have been made to extend the scope of the journal, so as to make analyses, selections, etc., from other journals—in short, *not limiting* this department to Southern journals.

Next Session of the Virginia State Medical Examining Board.

As it is probable that the first semi-annual session for 1888 of this Board will be held in this city before our April No. can give the exact information as to time, etc., we would suggest to all parties specially interested to write to the President, Dr. H. Gray Latham, of Lynchburg, Va., or the Secretary, Dr. Hugh T. Nelson, of Charlottesville, Va., for specific information. This will be an important Board session.

Obituary Record.

Dr. Otis Frederic Manson.

As announced in our February number, this eminent physician and author died at his home in Richmond, Va., on the morning of February 1st, 1888. He had been in feeble health for some months, due to nervous prostration from overwork—professional and literary—but was all the time, off and on, attending to the duties devolving upon him as a practitioner. Even on the day before his death he was in his office in response to calls, but that afternoon an apoplectic stroke siezed him, with the attendant paralysis and unconsciousness, in which condition he lingered for about twelve hours only, when death released his spirit from the body, and his record was finished.

Dr. Manson was born in Richmond, Va., October 10th, 1822, and his early life was spent in this city. At the early age of eighteen years, he had passed through his academic and medical college course, and in 1840, received his degree of Doctor of Medicine from the Medical Department of Hampden Sidney College—now the Medical College of Virginia. When nineteen years old, he married a daughter of the late Spottswood Burwell, Esq., of Granville Co., N. C., and at once moved to that county and State to begin the practice of medicine. His practice soon became extensive and lucrative; but the habits of study which he had formed kept him bent upon making advancement in the science of medicine. Recognizing the excellent opportunities he enjoyed for the clinical study of malarial diseases, he kept this subject continuously before him. He surrounded himself with ample libraries on malarial diseases, and it may be here remarked that his accumulations of literature—European, American, etc.—on this subject was at the time of his death about the most complete library that can be found in any private library in existence. He was among the foremost of the leaders who brought sulphate of quinine to prominence as a remedy for other diseases than simple chills and fever. It is to him that quinia in pneumonia owes a great share of its early prominence. He was the first of American writer to describe malarial puerperal fever, an honor which Dr. Fordyce Barker at one time thought belonged to him, but which he gracefully yielded to Dr. Manson after he had examined some journal literature which he had not previously seen. And thus we might mention one after another other rightful claims of priority or discovery which his friends have made for him, but most of which discoveries or advances have now become general property in the profession. Some three or four years ago, he published a monograph on *Sulphate of Quinine*, which was intended to be but a portion of a chapter of a work of two large volumes on malarial diseases, which is now in the form of incomplete manuscript. In the *Transactions of the Medical Society of Virginia* for 1886, is another chapter of the work he had proposed—the subject of that paper being *Malarial Hæmorrhage.* His numerous contributions to several of the Southern medical journals on malarial diseases, have given him authoritative eminence outside of the circle of his personal friends who had opportunities to enjoy his personal friendship. So that in his death before the work he had undertaken was completed the science of medicine suffers a

loss which it will take time to remedy, and the profession will have to remain indefinitely without information he had compiled from experience, observation and study of authorities too much neglected in the clinical and therapeutical studies of malarial diseases.

When the War between the States broke out in 1861, the Governor of North Carolina deputized Dr. Manson to come to Richmond to organize hospitals especially for the care of the sick and wounded of North Carolina soldiers in the Confederate Army. His work was thoroughly done, and his hospitals became models. These were soon transferred to the Confederacy and he became a Surgeon in the Confederate Army, in charge of hospitals for North Carolina soldiers. While filling this official position he won the admiration of his fellow officers and the devotion of the soldiers who were placed under his professional care.

The close of the War finding him in Richmond, he settled here, and resumed private practice. In 1867, he was elected Professor of Pathology in his alma mater, and in a year or so afterwards, on the resignation of Dr. L. S. Joynes, the chair of Physiology was added to his professorship. Not being in sympathy with certain policies of the Faculty of the College in 1882 or 3, he resigned his professorship. But the Board of Visitors of that Institution afterwards elected him an Emeritus Professor in recognition of his merits and serviceable connection with the College.

While residing in North Carolina, he took active interest in the State Society of that State, and was also a member of the North Carolina Board of Medical Examiners. When he moved to Virginia, he was elected an Honorary member of the Medical Society of North Carolina; and a similar honor he received at the hands of several Southern States and local Societies.

He was a charter member of the Medical Society of Virginia at its organization in 1870, and always manifested the liveliest interest in that body. He was also a member of the American Medical Association, as also of the Richmond Academy of Medicine until he resigned in 1883 and became one of the original members of the Richmond Medical and Surgical Society. In 1871 and 2, he was an associate Editor of the *Virginia Clinical Record* which was discontinued in March 1874. In short, his positions of honor and distinction were numerous and cordially conceded. For several years, he was President of the City Council of Richmond until he declined re-election to that body.

Such is a brief mention of some events of his life. There is nothing to conceal. Our notice is limited by the want of space. But could the record be prolonged, it would tell of many traits of character that are worthy of imitation. His sincerity of purpose to do right, not to dissemble, and the interest he would take in promoting friendships that he deemed worthy of cultivation are common sayings. He was steadfast in all that he conceived to involve a principle, a terror to those who sacrificed principle; but in matters where honest differences of opinion were held, he was respectful of the views of others not unduly persistent in enforcing those he maintained. Such a man must have his enemies, and yet we again say that even they must have admiration for his characteristic traits. Of course he had numerous friends who mourn his loss and feel what it is to lose a friend.

His wife died in 1872. In 1883 he married Mrs. Helen Watson who survives him.

Dr. E. Miles Willett, Sr.,

Late Professor of Clinical Medicine, Diseases of the Chest and Physical Diagnosis in the Memphis Hospital Medical College, and the Supreme Medical Examiner of the Catholic Knights of America, died suddenly at his home in Memphis, Tenn., February 6th, 1888. He was born February 1, 1833, in Bardstown, Ky., received his M. D. degree from Jefferson Medical College in 1855, and began practice in Memphis in 1857. The *Memphis Medical Monthly* presents a steel-plate engraving and a lengthy biographical sketch of the deceased, attesting the esteem in which his memory is held.

Mr. Henry Bergh

Died at his home in New York city, March 14th, 1888. He will be remembered as the President of the Society for the Prevention of Cruelty to Animals. Like fanatics generally who have some ground for plausibility, he carried his views to an extreme which sometimes made him an obstructionist. "To the medical profession, especially in the State of New York, he has long been known as the tireless and unremitting opponent of any and all experiments on animals."

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